ORDER NO. GAD8508017A2

Service Manual

Radio Cassette

RX-C300

(Black)

Portable Stereo Component System

This is the Service Manual for the following area.

MZ ...For Audio Club.

- Please use this manual together with the service manual for model No. RX-C300 M order No. GAD85032238C1
- This Service Manual indicates the main differences between;Original RX-C300 M and RX-C300 MZ For Audio Club.

■ PARTS COMPARISON TABLE

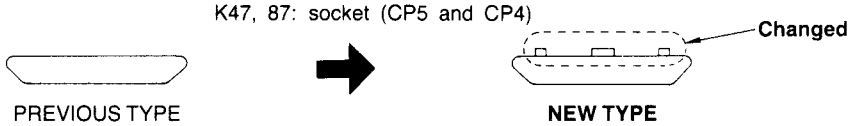
Notes: 1. Important safety notice.
Components identified by ⚠ mark have special characteristics important for safety.
When replacing any of these components, use only manufacturer's specified parts.
2. Please revise the original parts list in the Service Manual to conform to the changes shown herein. If new part numbers are shown, be sure to use them when ordering parts.

Ref. No.	Description	Part Number		Remarks
		RX-C300 M (Original)	**RX-C300 MZ (NEW)**	
P6	AC Plug Adaptor ⚠	——	**RJP120ZS**	Added
K47, 87	Socket (13P) CP5, 4	RJS13L12Z	**RJS13L12Y**	
A2	Joint Cable (Connector)	RJP0G1Z	**RJP0G1Y**	

CHANGED

•Note:
The joint cable currently used in RX-C300 to connect the Tuner Amplifier and Cassette Deck sections.
We have modified the joint cable connector and socket shapes for improvement of product performance.
Modified joint cable and socket pairs are available as replacement service parts. When replacing the old jack in both the Tuner Amplifier and Cassette Deck sections with a new one, be sure to replace the new joint cable, too.

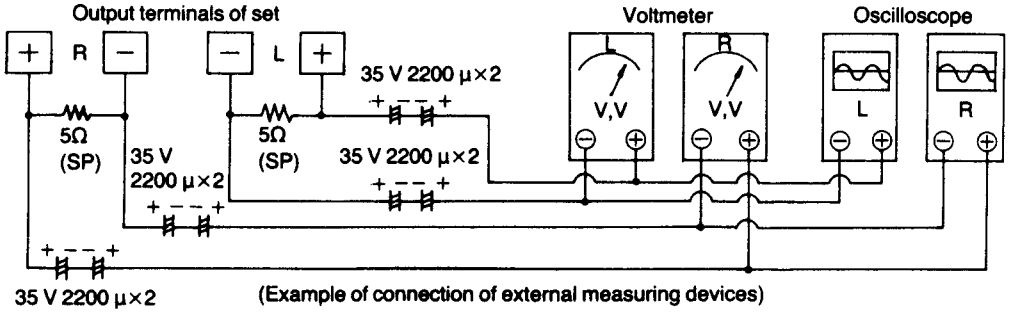
K47, 87: socket (CP5 and CP4)



■ CAUTION

Observe the following precautions when connecting a measuring device other than the accompanying speaker to an external speaker jack or a P.C. Board.

Note:
When connecting an external measuring device to an output line, connect an electrolytic capacitor between them to cut the direct current. Also, the positive (+) and negative (−) terminals of the left and right channels must be connected independently with respect to direct current and alternating current. Be particularly careful that measuring devices connected to different channels and placed in close proximity to each other do not contact each other.



(Example of connection of external measuring devices)

Panasonic

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ORDER NO. GAD85032238C1
A1

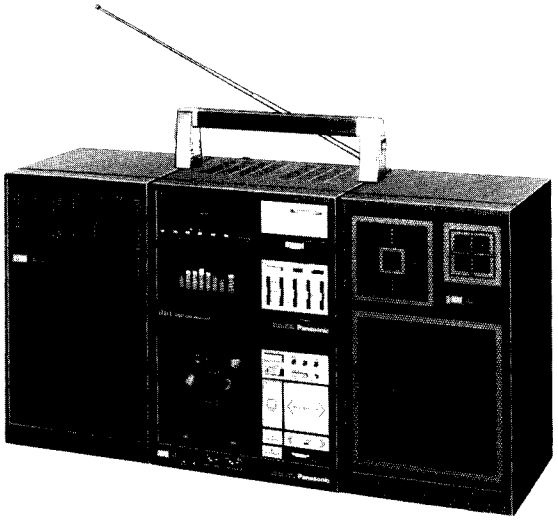
Service Manual

Portable Stereo Component System

Radio Cassette

RX-C300

(Black)



This is the Service Manual for the following areas.

[M]...For U.S.A.

[C]...For Canada.

■ SPECIFICATIONS

General:

Power Requirement: [M]... AC; 110~115/115~127/200~220/230~250 V, 50/60 Hz
[C]... AC; 120 V, 60 Hz
Battery; 15 V (Ten "D" Size Flashlight Batteries)
(UM-1 or equivalent)
Car battery; with optional car adaptor RP-9550

Power Consumption: 60 W (AC only)

Power Output: 80 W ...MPO

Speaker: Woofer; 6½" (16 cm), PM Dynamic Speaker (5Ω)
Squawker; 2½" (6.5 cm) PM Dynamic Speaker (5Ω)
Tweeter; 1½"×2" (2.8 cm×4.7 cm) Ceramic Speaker (1.4 kΩ)

Input: MIC; sensitivity 0.8 mV/applicable microphone impedance 200~600Ω, Ø3.5
PHONO; sensitivity 5 mV/47 kΩ over
LINE IN/CD; sensitivity 200 mV/47 kΩ over
DC IN; 13.2 V

Output: LINE OUT; sensitivity 420 mV/4.7 kΩ under
EXT SP; 5~8Ω
HEADPHONES; 32Ω, Ø3.5
EXT ANTENNA and EARTH

Dimensions: Not included handle, projecting parts and controls
System
23 1/16" (W)×12" (H)×7 5/16" (D)
(585×305×185) mm
Tuner Amplifier
8 7/16" (W)×5 7/8" (H)×7 5/16" (D)
(215×150×185) mm
Cassette Deck
8 7/16" (W)×5 7/8" (H)×7 5/16" (D)
(215×150×185) mm
Speaker
7 1/8" (W)×12" (H)×7 1/16" (D)
(181×305×180) mm
Max. size
System
23 1/16" (W)×15 1/16" (H)×7 15/16" (D)
(585×382×202) mm
Tuner Amplifier
9" (W)×6 3/16" (H)×7 15/16" (D)
(228×157×201) mm
Cassette Deck
9" (W)×6 3/16" (H)×7½" (D)
(228×157×190) mm
Speaker
7 3/16" (W)×12¼" (H)×7½" (D)
(182×311×190) mm

Weight: 10.8 kg (23 lb. 13 oz.) without batteries

Radio Section:

Radio Frequency Range: FM; 88~108 MHz
AM; 525~1610 kHz

Intermediate Frequency: FM; 10.7 MHz
AM; 455 kHz

Sensitivity: FM; 2.5 µV/50 mW output (−3 dB Limit sens.)
AM; 71 µV/m/50 mW output

Tape Deck Section:

Frequency Response: 40~15,000 Hz (with normal tape)
40~16,000 Hz (with CrO_2 tape)
40~16,000 Hz (with Metal tape)

Recording System: AC bias, AC erase

Tape Speed: 4.8 cm/s. (1 7/8 ips)

Track System: 4-track 2-channel stereo recording and playback

DOLBY SYSTEM

"Dolby" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.
Noise reduction system manufactured under license from Dolby Laboratories Licensing Corporation.

Weights and dimensions shown are approximate.
(Les poids et dimensions mentionnés sont approximatifs.)
Design and specifications are subject to change without notice.

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SAFETY PRECAUTIONS (For U.S.A.)

1. Before servicing, unplug the power cord to prevent an electric shock.
2. When replacing parts, use only manufacturer's recommended components for safety.
3. Check the condition of the power cord. Replace if wear or damage is evident.
4. After servicing, be sure to restore the lead dress, insulation barriers, insulation papers, sheilds, etc.
5. Before returning the serviced equipment to the customer, be sure to make the following insulation resistance test to prevent the customer from being exposed to a shock hazard.

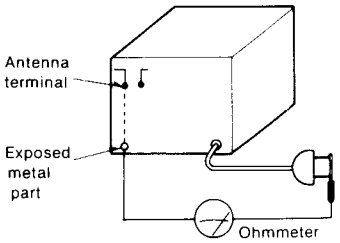


Fig. 1
Resistance = 3MΩ—5.2MΩ

INSULATION RESISTANCE TEST (For U.S.A.)

1. Unplug the power cord and short the two prongs of the plug with a jumper wire.
2. Turn on the power switch.
3. Measure the resistance value with ohmmeter between the jumpered AC plug and each exposed metal cabinet part, such as screwheads, antenna, control shafts, handle brackets, etc. Equipment with antenna terminals should read between 3MΩ and 5.2MΩ to all exposed parts*. (Fig. 1) Equipment without antenna terminals should read approximately infinity to all exposed parts. (Fig. 2)
   * **Note:** Some exposed parts may be isolated from the chassis by design. These will read infinity.
4. If the measurement is outside the specified limits, there is a possibility of a shock hazard. The equipment should be repaired and rechecked before it is returned to the customer.

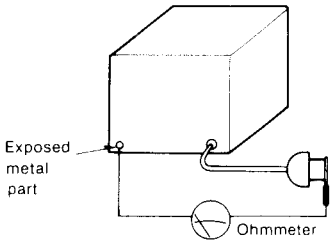
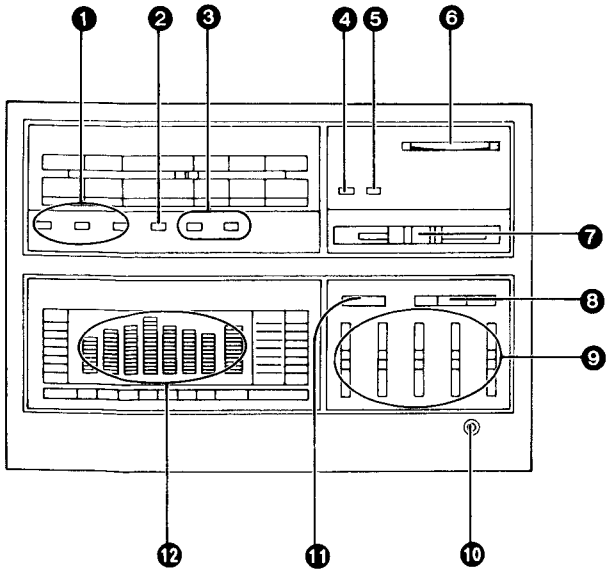
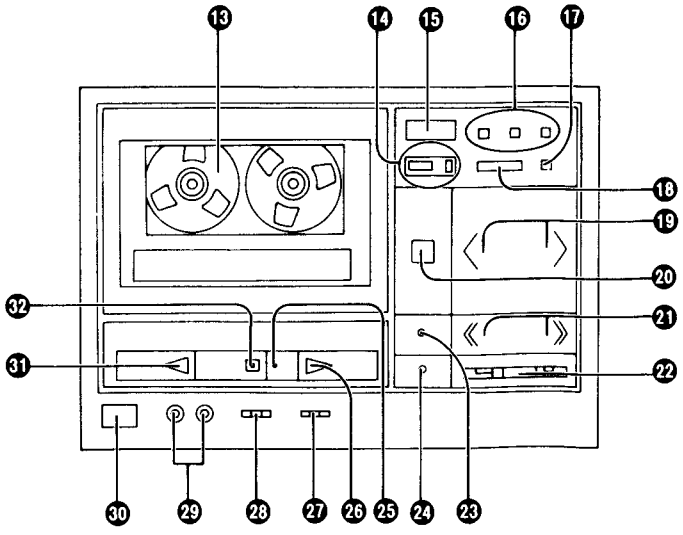
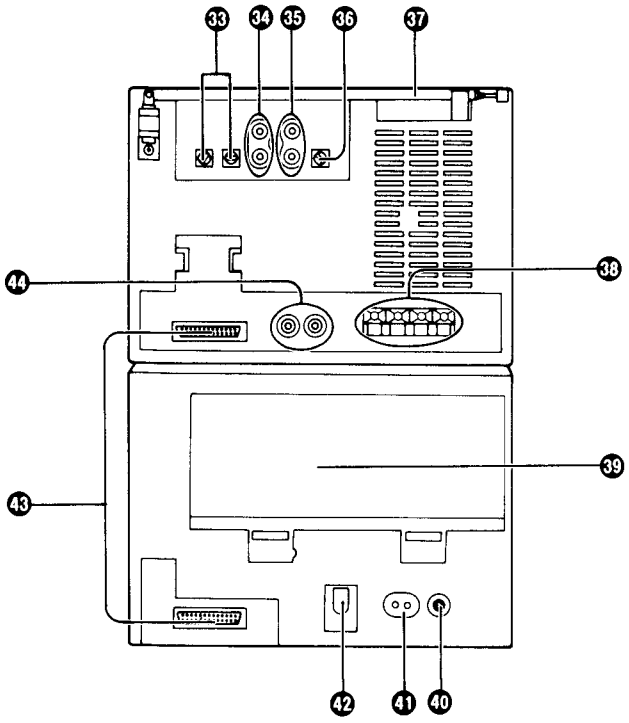


Fig. 2
Resistance = Approx ∞

LOCATION OF CONTROLS AND COMPONENTS







CASSETTE DECK

⑬ **Cassette Compartment**
⑭ **Tape Counter and Reset Button (COUNTER)**
⑮ **Eject Button (▲EJECT)**
⑯ **Reverse Mode Selector (REVERSE MODE)**
⑰ ***Dolby Noise Reduction Switch (DOLBY NR)**
⑱ **Blank Skip Switch (BLANK SKIP)**
⑲ **Playback Button (〈REV-PLAY-FWD〉)**
⑳ **Stop Button (□STOP)**
㉑ **Fast Forward/Rewind Button (《 FF/REW 》)**
㉒ **Mixing Level Control (MIXING LEVEL)**
㉓ **Record Muting Button (○REC MUTE)**
㉔ **Record Standby Button (● REC STANDBY)**
㉕ **Recording Indicator (REC)**
㉖ **Forward Indicator (FWD)**
㉗ **Tape Selector (TAPE SELECTOR)**
㉘ **Timer Standby Selector (TIMER STANDBY)**
㉙ **Microphone Jacks (MIC) ∅3.5, 0.8 mV, 200~600Ω**
Connect the Mixing Microphone to the left channel (marked [L]).
㉚ **Power Switch (POWER)**
㉛ **Reverse Indicator (REV)**
㉜ **Power/Battery Check Indicator (POWER/BATT)**

TUNER AMPLIFIER

❶ **Function Selector (FUNCTION)**
❷ **FM Mode Selector/Beat Proof Switch (FM MODE/B.P)**
❸ **Band Selector (BAND)**
❹ **FM Stereo Indicator (FM ST)**
❺ **Tuning Indicator (TUNING)**
❻ **Tuning Control (TUNING)**
❼ **Volume Control (VOLUME)**
❽ **Balance Control (BALANCE)**
❾ **Graphic Equalizer Controls (GRAPHIC EQUALIZER)**
❿ **Headphones Jack (PHONES) ∅3.5, 32Ω**
When using the headphones, avoid listening to sound for a long period of time and avoid excessive volume levels, which may injure your ears.
⓫ **Spectrum Analyzer Switch (SPECTRUM ANALYZER)**
⓬ **Spectrum Analyzer (SPECTRUM ANALYZER)**

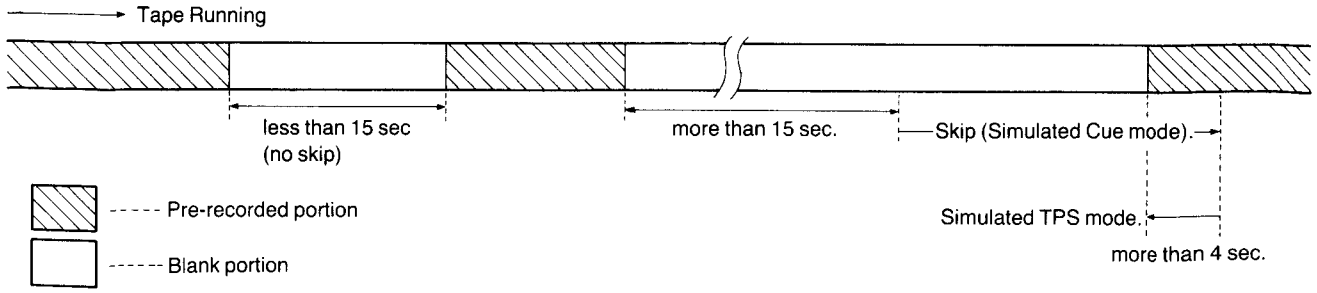
REAR PANELS

㉝ **External Antenna Terminals (FM ANT)**
㉞ **Line/CD Input Jacks (LINE IN/CD)**
㉟ **Phono Input Jacks (PHONO)**
㊱ **Phono Ground Terminal (⏚)**
㊲ **Telescopic Antenna**
㊳ **Speaker Terminals (SPEAKER IMP 5–8Ω)**
Connect to the speakers with included speaker cables.
㊴ **Battery Compartment**
㊵ **DC Input Jack [DC IN 13.2 V (12–15 V) ⊖⊙⊕]**
㊶ **AC Socket (AC IN~)**
㊷ **Voltage Selector (VOLTAGE SELECTOR)**
For U.S.A. only.
㊸ **Female Connectors**
Connect with included cables.
㊹ **Line Output Jacks (LINE OUT)**

Blank Skip Function

Pressing the Blank Skip Switch during tape playback will set the unit to the TPS mode when a blank interval of more than 15 seconds is detected on the tape, and playback will begin from the start of the next selection.
- Useful for skipping over the unrecorded portion at the end of the tape during Auto-Reverse Playback.

Note:
The Blank Skip Function may not work correctly with some pre-recorded tape, such as classical music where there are many low sound levels. In this case set the Blank Skip Switch to "OFF".



Ⓓ

DISASSEMBLY INSTRUCTIONS

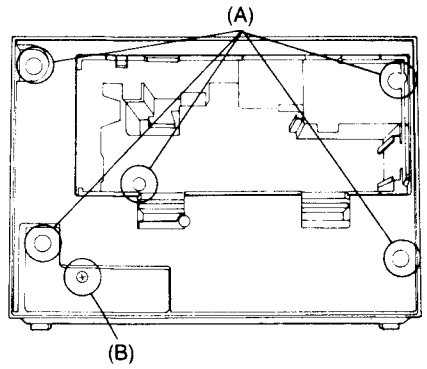


Fig. 1

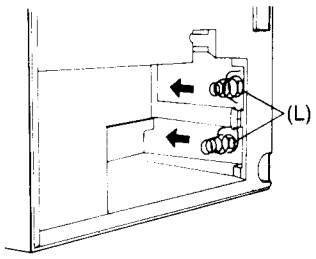


Fig. 5

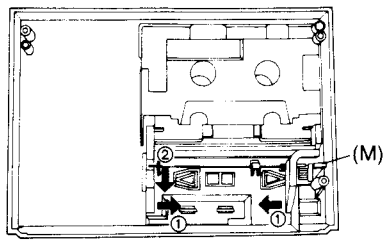


Fig. 6

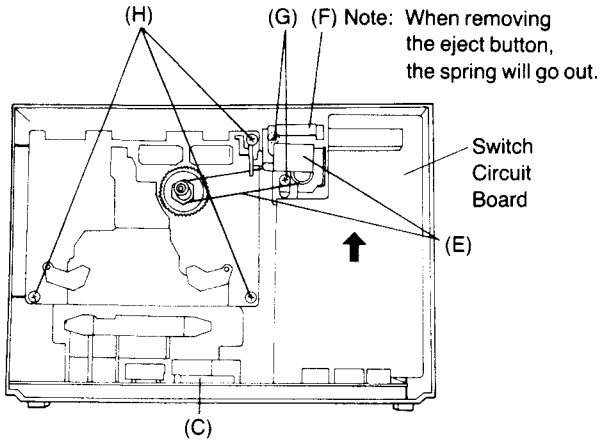


Fig. 2

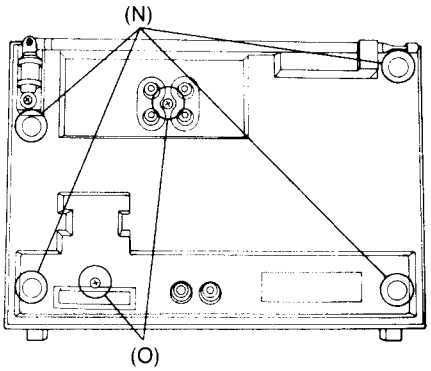


Fig. 7

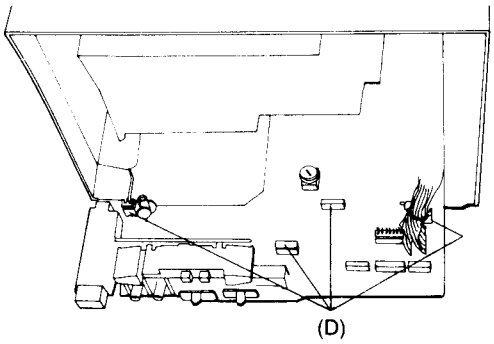


Fig. 3

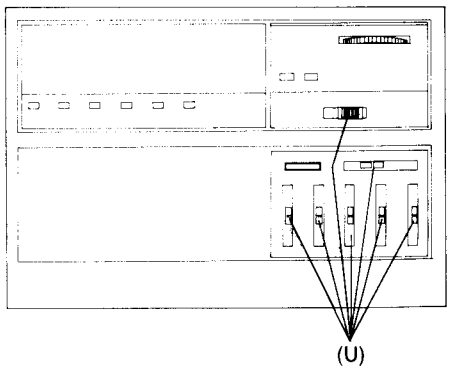


Fig. 8

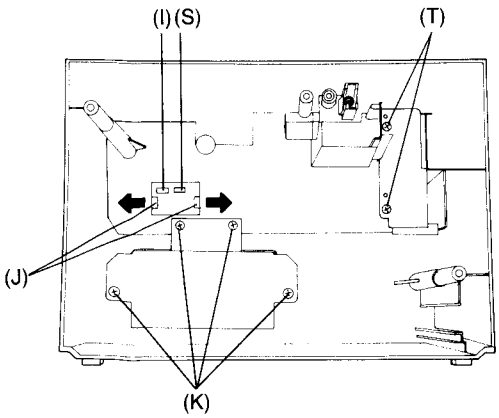


Fig. 4

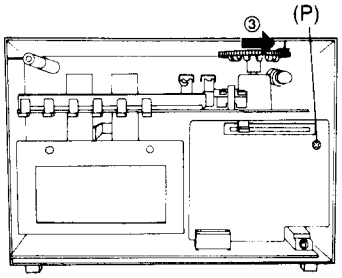


Fig. 9

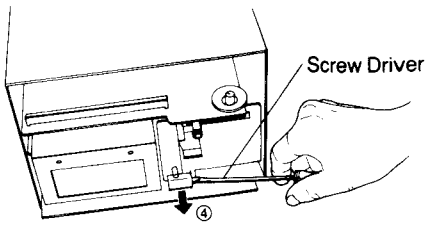


Fig. 10

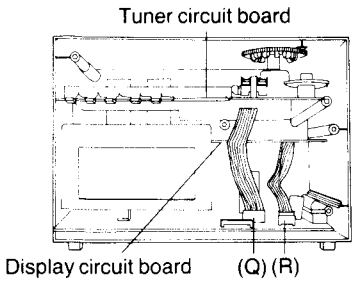


Fig. 11

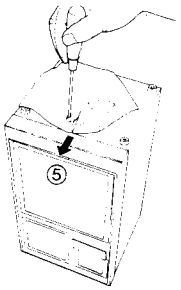


Fig. 12

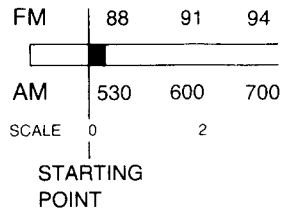


Fig. 13

Ref. No.	Shown in Fig.—.	To remove —.	Remove —.
Cassette Deck			
1	1	Front cabinet	Screw (3×65) mm ..... (A)×5
2	1		Screw (3×10) mm ..... (B)×1
3	——		Push the eject button.
4	——		Remove the front cabinet and mixing level knob together.
5	2	Mechanism and circuit board	Pull out the tape amplifier circuit board until it is possible to remove the switch circuit board ..... (C)×1
6	2		Remove the switch circuit board in the direction of arrow.
7	3		Pull out the socket. ..... (D)×4
8	2		Remove the counter and counter belt. ..... (E)×2
9	2		Eject button ..... (F)×1
10	2		Screw (3×12) mm ..... (G)×2
11	2		Screw (3×10) mm ..... (H)×3
12	——		Remove the circuit board and mechanism together.
13	4		Connector ..... (S)×1
14	4	Power transformer	Pull out the socket ..... (I)×1
15	4		Push the tooth and remove the circuit board. ..... (J)×2
16	4		Screw (3×10) mm ..... (K)×4
17	4	Battery circuit board	Screw (3×10) mm ..... (T)×2
16	5		Push the tooth and remove the circuit board in the direction of arrow. .. (L)×2
17	6	Cassette holder	Pull out the gear. ..... (M)×1
18	6		Push the cassette holder in the direction of arrow ①.
19	6		Remove the spring in the direction of arrow ②.
Tuner Amplifier			
1	7	Front cabinet *1, 2	Screw (3×65 mm) ..... (N)×4
2	7		Screw (3×10 mm) ..... (O)×2
3	8		Knob ..... (U)×7
3	9	Tuner circuit board	Screw (3×10 mm) ..... (P)×1
4	10		Remove the circuit board in the direction of arrow ④.
5	11		Socket ..... (Q)×1
6	——		Pull out the tuner circuit board.
7	11	Display circuit board	Socket ..... (R)×1
8	——		Pull out the display circuit board.
9	11	Speaker grille *3	Push the grille in the direction of arrow ⑤.

*1. Turn the drum gear in the direction of arrow ③ as shown in fig. 9.
*2. Set the pointer at the position as shown in fig. 13.
*3. The speaker box is made of a relatively soft material (9-mm-thick particle board). Be careful not to tighten the screws excessively when attaching anything to the box in order not to damage the threads.
- If the threads are damaged, also use a bonding agent to attach the speaker box stopper to the speaker box so that the speaker box does not fall when attached to the main unit (tuner amplifier block or cassette deck block).

MEASUREMENTS AND ADJUSTMENTS

■ ALIGNMENT INSTRUCTION

READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT.

1. Set volume control to minimum.
2. Set graphic equalizer to center.
3. Set band switch to AM or FM.
4. Set balance control to center.
5. Set mode switch to stereo.
6. Set power source voltage to 15 V DC.
7. Output of signal generator should be no higher than necessary to obtain an output reading.

■ MW and SW ALIGNMENT

	BAND	SIGNAL GENERATOR or SWEEP GENERATOR		RADIO DIAL SETTING	INDICATOR (ELECTRONICS VOLTMETER or SCOPE)	ADJUSTMENT	REMARKS
		CONNECTIONS	FREQUENCY				
		AM-IF ALIGNMENT					
(1)	AM	Fashion loop of several turns of wire and radiate signal into loop of receiver.	455 kHz 30% Mod. at 400 Hz	Point of non-interference. (on/about 600 kHz)	Output meter across voice coil	T2 (AM IFT)	Adjust for maximum output.
		MW-RF ALIGNMENT					
(2)	AM	〃	511 kHz	Tuning capacitor fully closed	〃	L7 (AM OSC Coil)	Adjust for maximum output.
(3)	AM	〃	1,650 kHz	Tuning capacitor fully open	〃	CT6 (AM OSC Trimmer)	〃
(4)	AM	〃	550 kHz	Tune to signal.	〃	(＊1)L4 (AM ANT Coil)	Adjust for maximum output. Adjust L4 by moving coil bobbin along ferrite core.
(5)	AM	〃	1,500 kHz	〃	〃	CT3 (AM ANT Trimmer)	Adjust for maximum output. Repeat steps (2)~(5).

(＊1)Cement antenna bobbin with wax after completing alignment.

■ FM ALIGNMENT

	BAND	SIGNAL GENERATOR or SWEEP GENERATOR		RADIO DIAL SETTING	INDICATOR (ELECTRONICS VOLTMETER or SCOPE)	ADJUSTMENT	REMARKS
		CONNECTIONS	FREQUENCY				
		FM-IF ALIGNMENT					
(1)	FM	High side thru. 0.001 μF to test point ▼. Negative side to test point ▼.	10.7 MHz (SWP.)	Point of non-interference. (on/about 90 MHz)	Connect vert. amp. of scope to test point ▼. Negative side to test point ▼.	T1 (FM 1st IFT)	Adjust for maximum amplitude. (Refer to fig. 6).
(2)	FM		〃	〃	〃	T3 (FM 2nd IFT)	Adjust for maximum amplitude. (Refer to fig. 7).
		FM-RF ALIGNMENT					
(3)	FM	Connect to test point ▼ through FM dummy antenna. Negative side to test point ▼.	86.2 MHz	Variable capacitor fully closed	Output meter across voice coil	L3 (FM OSC Coil)	(＊2) Adjust for maximum output.
(4)	FM		109.2 MHz	Variable capacitor fully open	〃	CT2 (FM OSC Trimmer)	〃
(5)	FM		90 MHz	Tune to signal.	〃	L2 (FM ANT Coil)	〃
(6)	FM		106 MHz	〃	〃	CT1 (FM ANT Trimmer)	(＊2) Adjust for maximum output. Repeat steps (3)~(6).

(＊2) Three output responses will be present: proper tuning is the center frequency.

■ SEPARATION ALIGNMENT

	ITEM	FM SIGNAL GENERATOR SOURCE CONNECTION	EQUIPMENT CONNECTION ELECTRONIC COUNTER	ADJUSTMENT	SPECIFICATION	REMARKS
(1)	Adjustment of pilot signal	98 MHz, 60 dB (CW) Connect to test point ▼3 through FM dummy antenna. Negative side to test point ▼5.	▼8 ... (+) ▼5 ... (−)	VR1	19 kHz	Adjust VR1, for 19 kHz (±150 Hz) reading on electronics counter.

■ AUDIO ADJUSTMENT

	ITEM	INPUT	MEASUREMENT POINT	SPECIFICATION	ADJUSTMENT POINT	REMARKS
(1)	Azimuth	QZZCAC (10 kHz, −20 dB)	EXT SP	Maximum output	Azimuth screw (Refer to Fig. 2.)	Playback mode (FWD and REV Playback)
(2)	Playback level	QZZCLA (315 Hz, 0 dB)	▼9 ... (Rch) ▼10 ... (Lch) ▼1 ... (−)	410±25 mV	VR100 (Lch) VR200 (Rch)	Playback mode Tape switch ... Normal Dolby NR ... OUT
(3)	Erase current	Use metal tape.	▼12 ... (+) ▼5 ... (−)	180^{+5}_{-10} mV	VR302	Record mode Beat proof switch→ II Tape switch→Metal
(4)	Bias current	Use normal and metal tape.	▼4 ... (Lch) ▼5 ... (Rch) ▼6 ... (−)	Normal 4.8 ±0.2 mV Metal 8.3±1.5 mV	VR101 (Lch) VR201 (Rch)	Record mode Beat proof switch→ II Tape switch→Normal→Metal
(5)	Overall gain	Line IN f=1 kHz, −24 dB	Line OUT	Output voltage ...0±1 dB	VR102 (Lch) VR202 (Rch)	1. Apply a −24 dB 1 kHz signal from the line input terminal. 2. Measure the output voltage of line output terminals. 3. Then, with the unit in the record mode and,record the signal. 4. Playback the recorded part, and measure the output voltage of line output terminals. 5. Compare the output voltage measured in items 2 and 4, and adjust so there is no difference in the level. (Adjust to obtain 0±1 dB.)

■ SPECTRUM ANALYZER ADJUSTMENT

ITEM	INPUT	MEASUREMENT POINT	ADJUSTMENT	SPECIFICATION	REMARKS
Limit voltage adjustment	Do not supply any audio signal.	IC204—Pin ④ to ⑦...(+) CS2—Pin ④...(−)	VR600	less than ±0.05 V need adjustment +0.05 V 0 V −0.05 V need adjustment	Use oscilloscope.
Total level indicator adjustment	Line In (1 kHz, −14 dB)	Total level indicator Refer to Fig. 1.	VR602	The red segments are not indicated.	Set graphic equalizer to center.

■ TAPE SPEED ADJUSTMENT

COUNTER	ADJUSTMENT
Connect to earphone jack	1. Play back test tape (QZZCWAT, 3 kHz). 2. Adjust VR until 3000 Hz±90 Hz is read on the counter.

CAUTION (Refer to Fig. 9.)

Observe the following precautions when connecting a measuring device other than the accompanying speaker to an external speaker jack or a P.C. Board.

Note:
When connecting an external measuring device to an output line, connect an electrolytic capacitor between them to cut the direct current. Also, the positive (+) and negative (−) terminals of the left and right channels must be connected independently with respect to direct current and alternating current. Be particularly careful that measuring devices connected to different channels and placed in close proximity to each other do not contact each other.

■ ALIGNMENT POINT

●Please refer to Circuit Boards and Wiring Connection Diagram which is located test point.

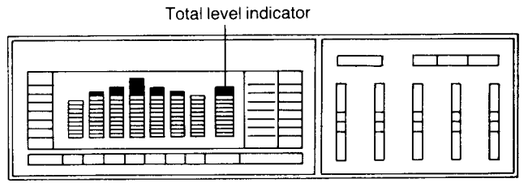


Fig. 1

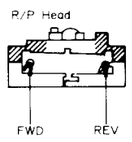


Fig. 2

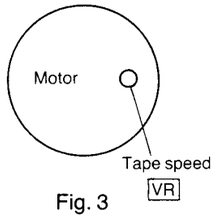


Fig. 3

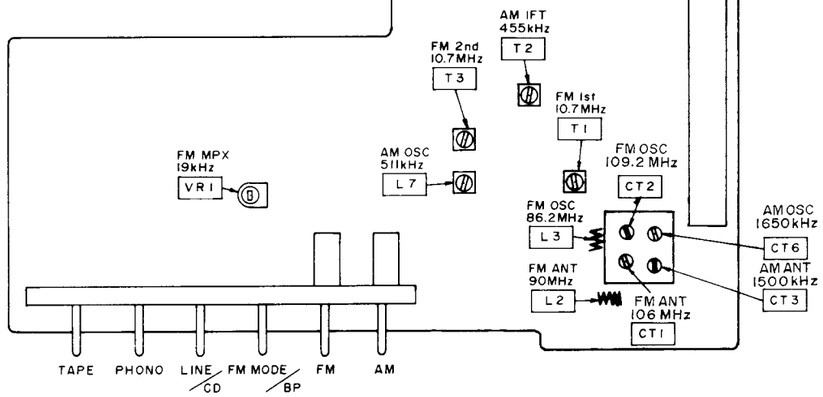


Fig. 4

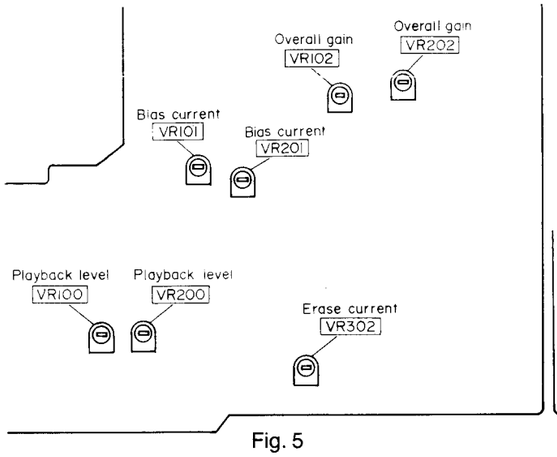


Fig. 5

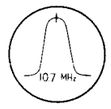


Fig. 6

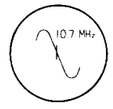


Fig. 7

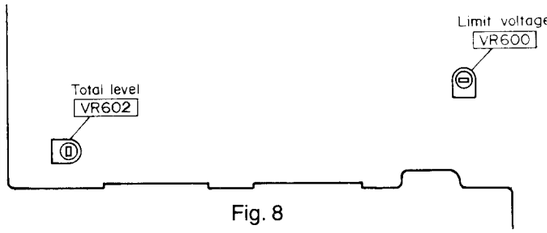


Fig. 8

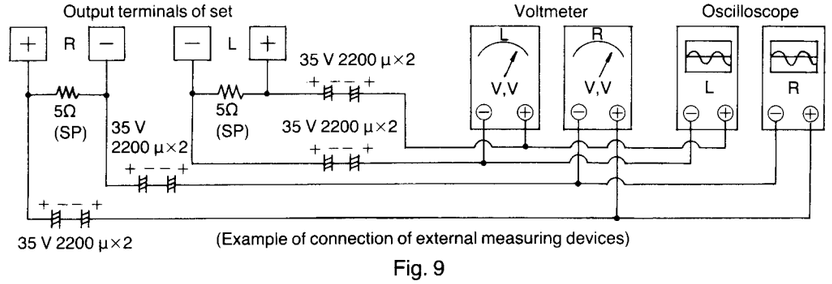


Fig. 9

▼ Be sure to fold at the (▼) mark so that mark is on the outside.

Ⓓ

CIRCUIT DESCRIPTION

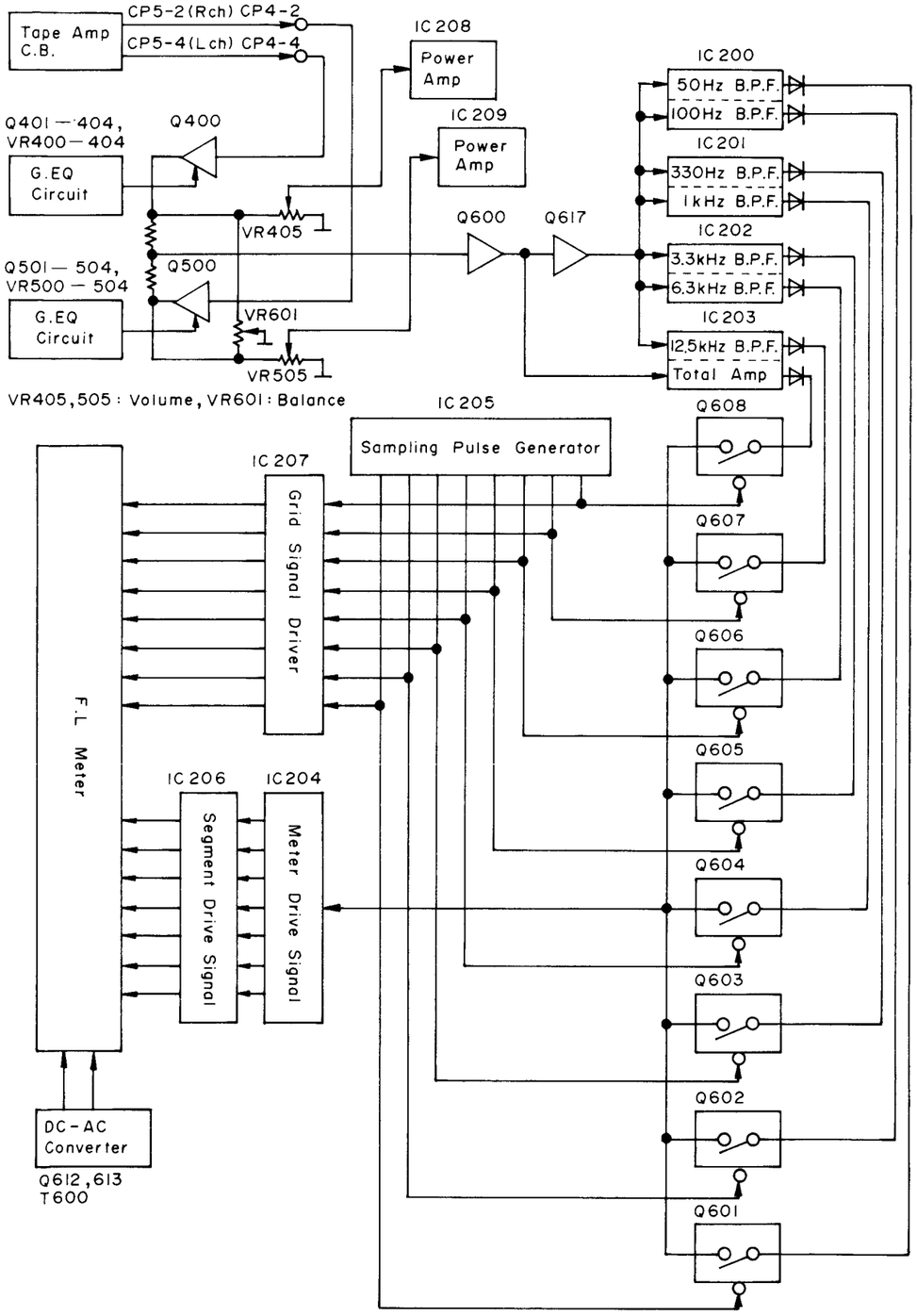


Fig. 1. Block Diagram

Display Principle of the Spectrum Analyzer

The output signal (tape playback, line, or radio signal) from the tape amplifier circuit board passes through the power amplifier circuit and then is input to Q400 and Q500 on the graphic equalizer circuit board. The output from Q400 and Q500 is divided into two signals. One is input to the graphic equalizer circuit composed of Q401–Q405, Q501–505, VR400–409, and VR400–404, and after its 100 Hz, 330 Hz, 1 kHz, 3.3 kHz, and 12.5 kHz frequency components have been attenuated or amplified between −10 dB and +10 dB by the respective graphic equalizer controls, the signal is fed back to Q400 and Q500 and added to the original sound.

The other signal passes through the balance and volume controls and, in addition to being input to the power amplifier, it is sent through R404 and R504 to the Q600 and Q617 amplifiers as a left and right mixed signal. The output of these amplifiers is input to the IC200–IC203 band pass filter and then is passed through a smoothing circuit composed of a diode and a condenser from which it is output as a DC signal. The selective frequencies of the band pass filter are determined by the value of the CR attached to the outside of each IC.

IC Selective Frequencies

Output pin No.	IC200-8	IC200-2	IC201-8	IC201-2	IC202-8	IC202-2	IC203-8	IC203-2
Frequency (Hz)	50	100	330	1 k	3.3 k	6.3 k	12.5 k	TOTAL

Further, in IC205 208 Hz signals each with shifted phases are made and output from pins 9–16. These are then sent to the IC207 grid driver and Q601–608 sampling gates. The signal sent to IC207 is inverted and then input to grids 1–8 of the F/L meter. The signal converted to a DC signal by IC200–IC203 and their peripheral circuits is input to sampling gates Q601–Q608, and when a low signal is then input to the base of each gate, the gate closes and the signal is output to pin 4 of IC204.

The DC signal input to IC204 is converted to a seven-step meter drive signal and input to IC206, from which it is output to the F/L meter as a segment drive signal.

In addition to the above grid drive signal and segment drive signal, a 322 Hz AC voltage is applied to the F/L meter by a DC/AC converter circuit composed of Q612, Q613 and T600 and used as the power supply for the filament.

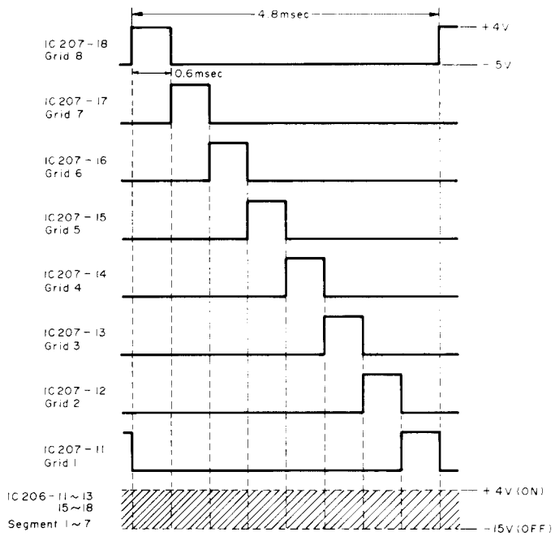

4.8msec
+4V
IC 207 - 18 Grid 8
-5V
0.6msec
IC 207 - 17 Grid 7
IC 207 - 16 Grid 6
IC 207 - 15 Grid 5
IC 207 - 14 Grid 4
IC 207 - 13 Grid 3
IC 207 - 12 Grid 2
IC 207 - 11 Grid 1
IC 206 - 11 ~ 13 15 ~ 18 Segment 1 ~ 7
+4V (ON)
-15V (OFF)

Fig. 2. Timing Chart

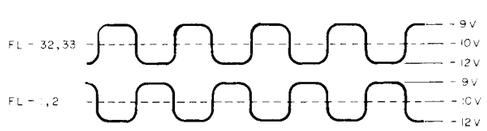


Fig. 3. "F" Signal

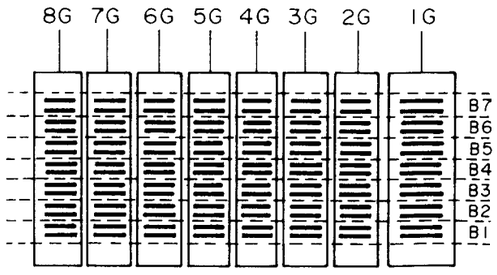


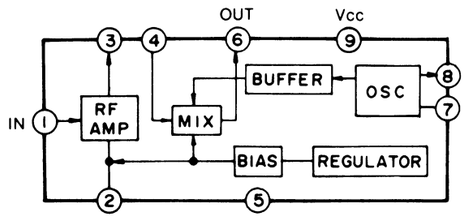
Fig. 4. FL Tube

33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
F	F	NP	NP	8 G	NC	NC	7 G	NC	NC	NC	6 G	NC	NC	5 G	NC	NC	4 G	NC	B7	3 G	B6	B5	2 G	B4	B3	B2	1 G	B1	NP	NP	F	F

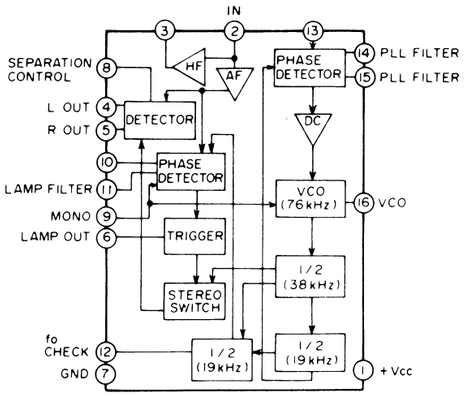
Fig. 5. FL Tube Pin Assignment

SCHEMATIC DIAGRAM (Tuner)

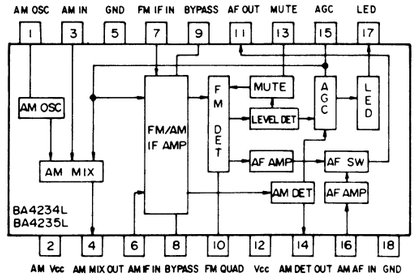
IC1 RVITA7358P



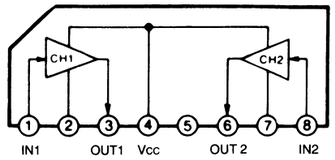
IC3 RVIBA1332L



IC2 BA4234L



IC4 RVIBA328MR

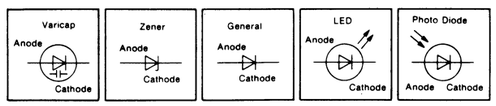


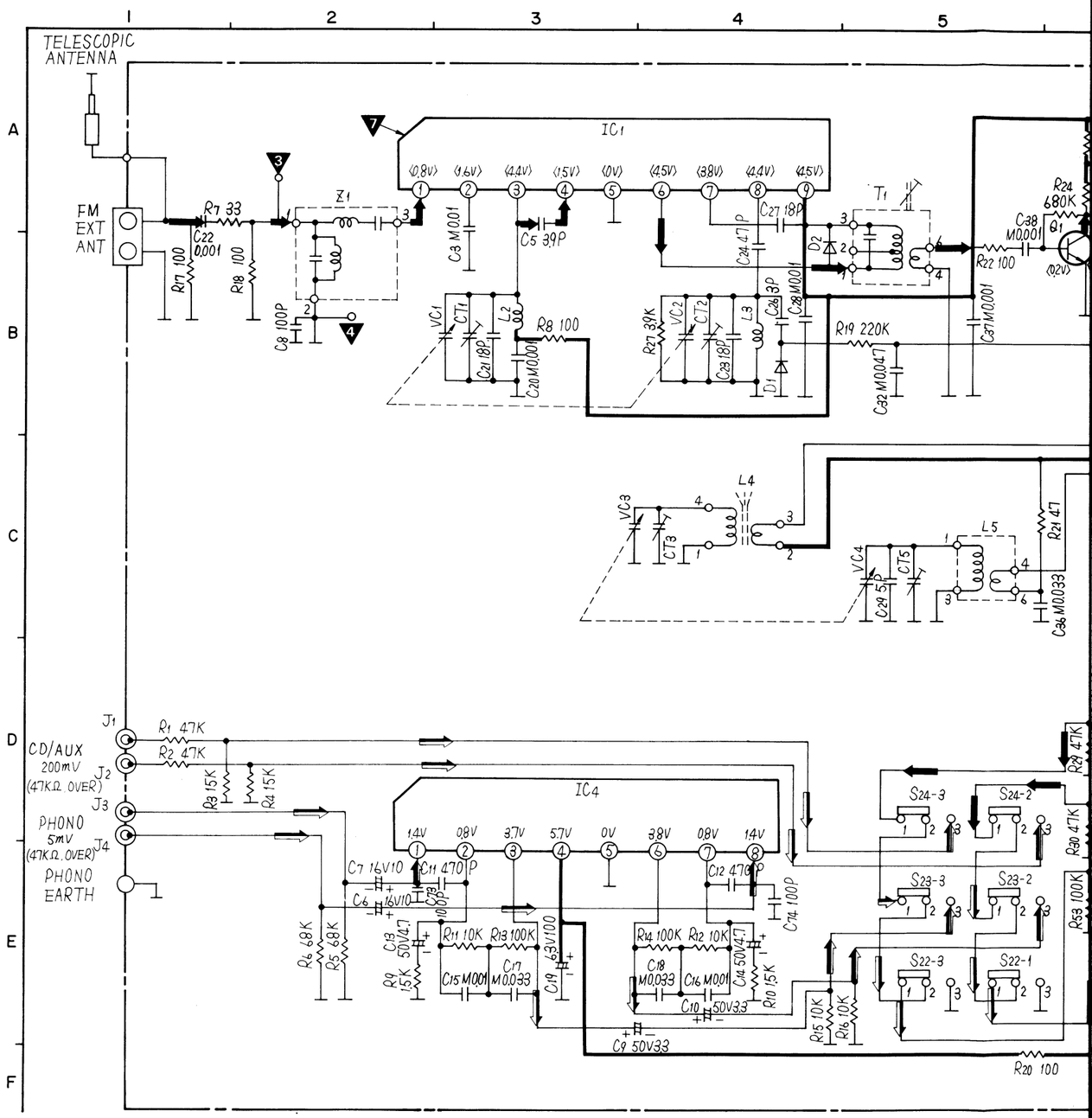
Ref No.	Zone	Part No.	Function Name
IC1	A•3	RVITA7358P	FM FRONT END
IC2	B•8	BA4234L	FM IF DET AM OSC IF
IC3	C•7	RVIBA1332L	FM MPX
IC4	D•3	RVIBA328MR	PHONO AMP
Q1	B•6	2SC1359B	FM IF AMP
Q4	D•8	2SA564R	MUTING
Q5	F•8	2SC1740R	REGULATOR
Q6	E•6	2SC1740R	BUFFER AMP
Q7	E•6	2SC1740R	BUFFER AMP
Q8	C•9	2SA564R	SWITCHING
D1	B•4	MA840B	A FC
D2	B•4	MA165	AGC
D3	B•6	MA165	SWITCHING
D4	B•8	LN021244PH	TUNING IND
D5	D•7	LN021244PH	FM ST IND
D8	E•8	RVDMTZ6R8B	ZENER
D9	E•8	MA165	SWITCHING

Notes:

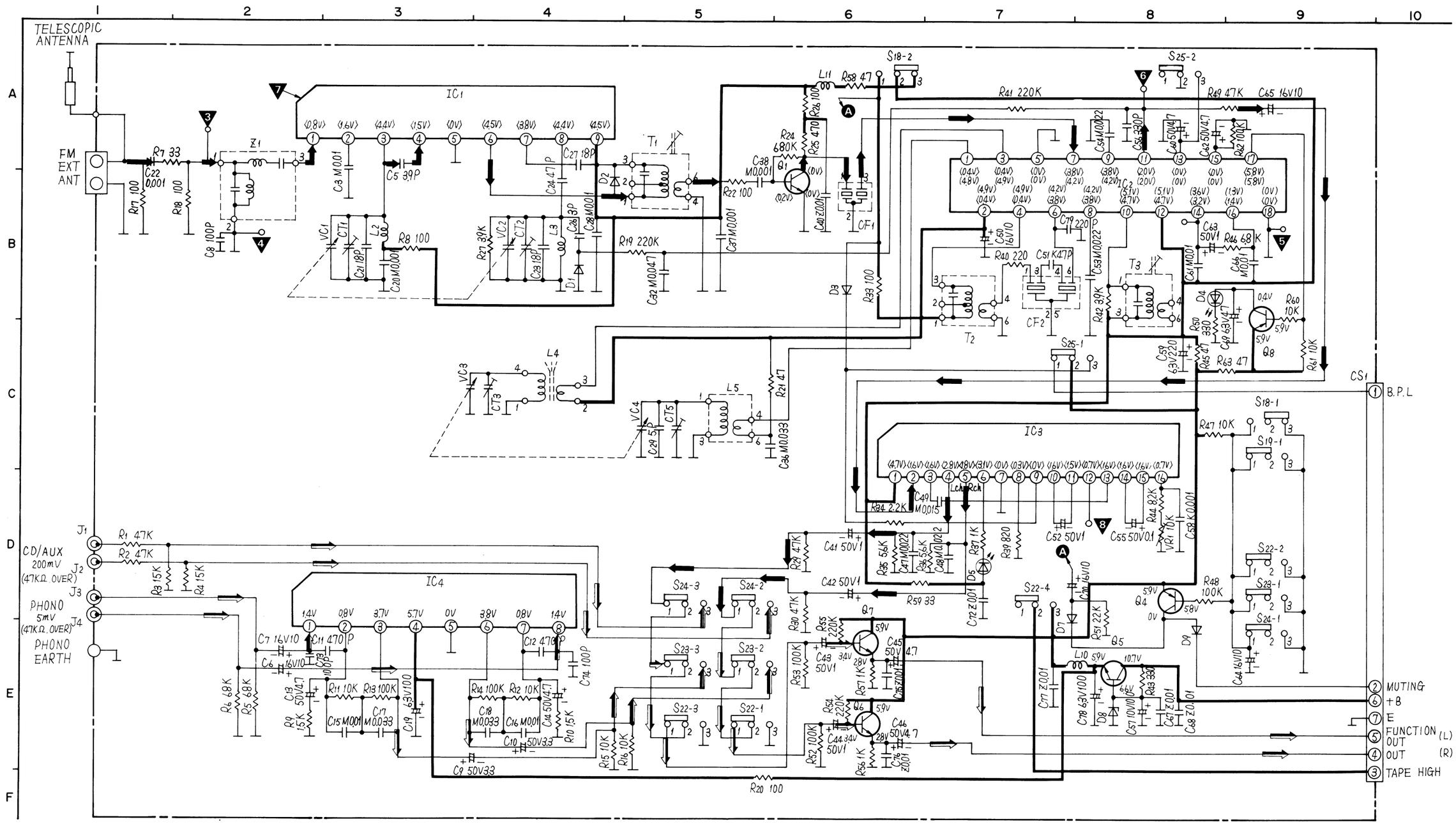
1. S18, S19: Band switch in "FM" position.
   (S18-1, S18-2...FM, S19-1...AM)
2. S22~S24: Function switch.
   (S22-1~S22-4...TAPE, S23-1~S23-3...PHONO, S24-1~S24-3...LINE/CD)
3. S25-1, S25-2: FM Mode/Beat Proof switch in "STEREO/I" position
   (1...STEREO/I, 3...MONO/II)
4. VR1: VCO adjustment.
5. DC voltage measurement are taken with electronics voltmeter from negative terminal of battery.
   < >...FM, ( )...AM, No mark... Phono

⊕ Voltage Line
FM Signal Line
Tape/Phono/Radio/CD/LINE IN



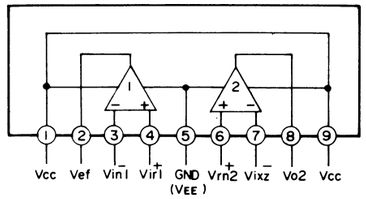


SCHEMATIC DIAGRAM (Tuner) MODEL RX-C300

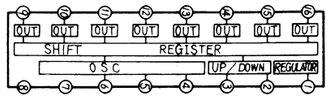


SCHEMATIC DIAGRAM (Amplifier) M

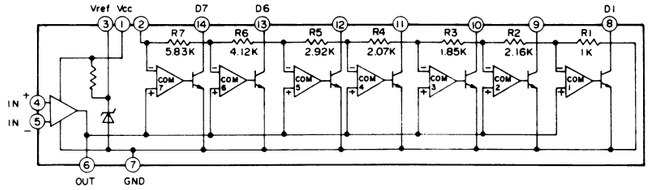
IC200~203 AN6561



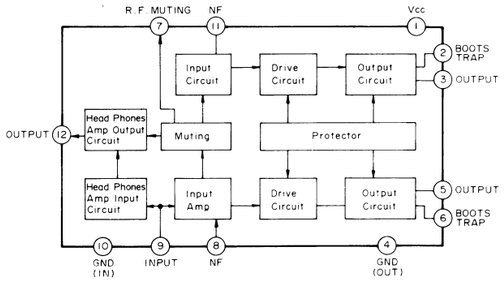
IC205 RVIM54832P-1



IC204 LB1407



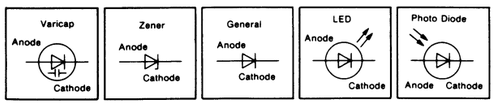
IC208, 209 AN7161N



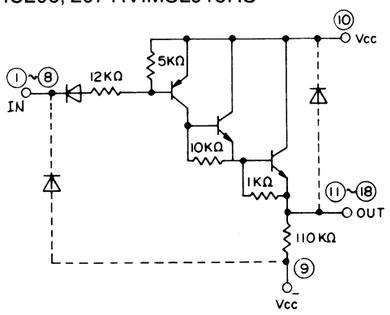
Notes:

1. S26: Spectrum analyzer switch in "ON" position.
   (1...ON, 3...OFF)
2. VR400~VR404, VR500~VR504: Graphic equalizer
   VR405, 505: Volume control
   VR600: Limit voltage adjustment
   VR601: Balance control
   VR602: Total level adjustment
3. DC voltage measurements are taken with electronics voltmeter from negative terminal of battery.
   < >...Spectrum analyzer on
   No mark...Tape (play)

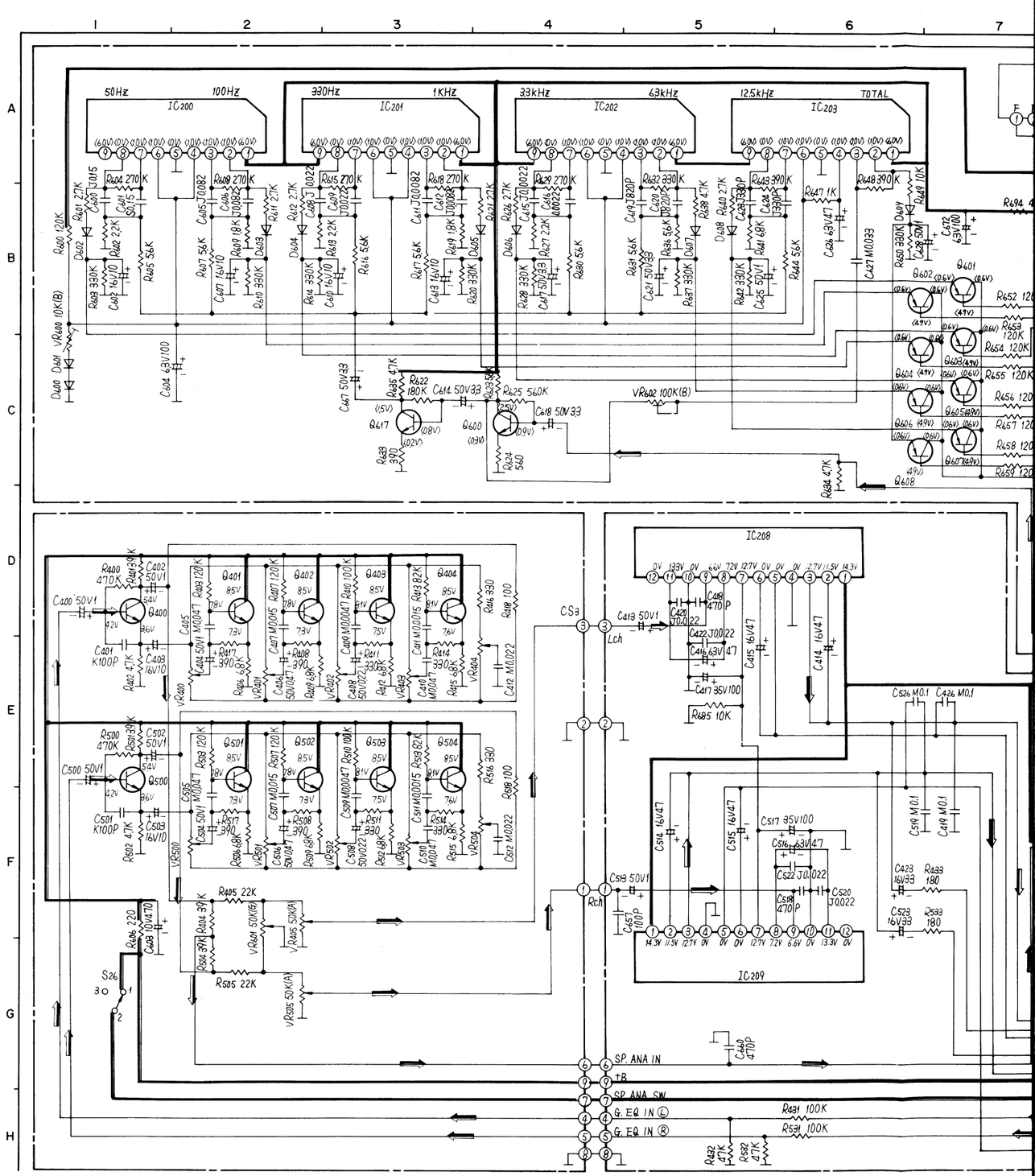
⊕ Voltage line
AC/DC line
Tape/Phono/Radio/CD/LINE IN



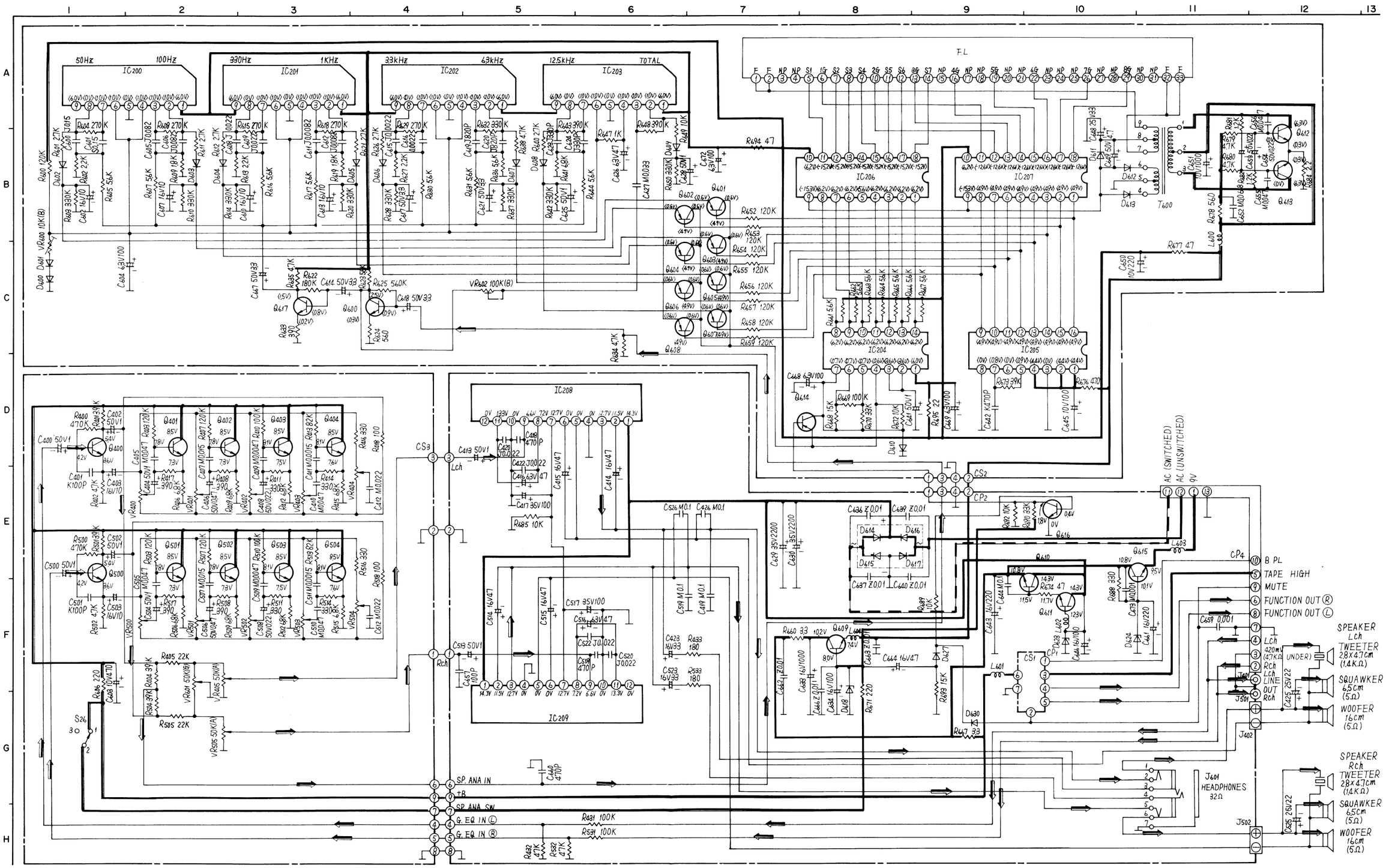
IC206, 207 RVIMSL915RS



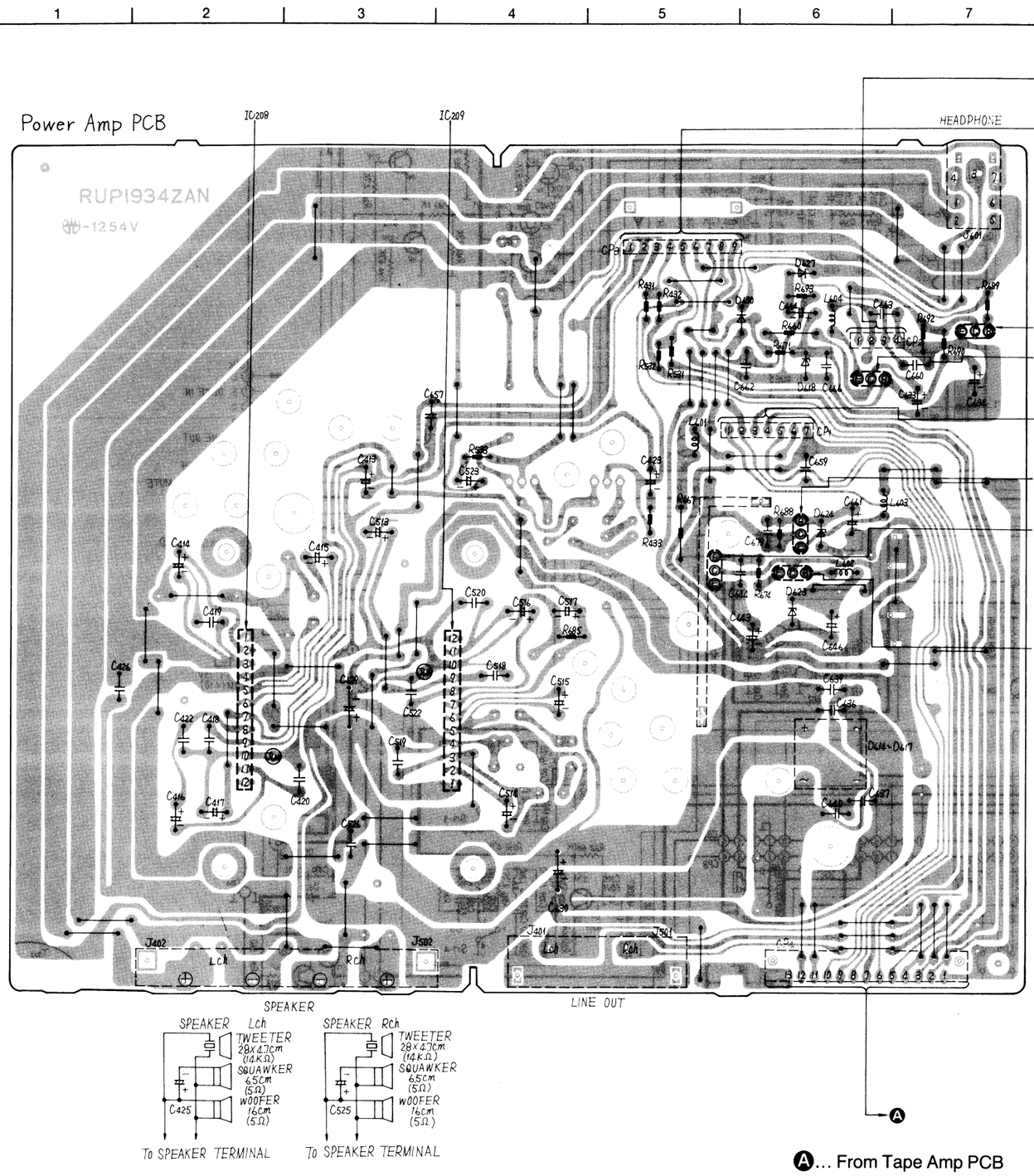
Ref No.	Zone	Part No.	Function Name
IC200	A•2	AN6561	BAND PASS FILTER AMP
IC201	A•3	AN6561	BAND PASS FILTER AMP
IC202	A•4	AN6561	BAND PASS FILTER AMP
IC203	A•6	AN6561	BAND PASS FILTER AMP
IC204	D•8	LB1407	LEVEL METER
IC205	D•10	RVIM54832P-1	8 ch SELECTOR
IC206	B•8	RVIMSL915RS	SEGMENT DRIVER
IC207	B•10	RVIMSL915RS	GRID DRIVER
IC208	D•6	AN7161N	POWER AMP
IC209	G•6	AN7161N	POWER AMP
Q400	D•1	2SC1740S	G EQ AMP
Q401	D•2	2SC1740R	G EQ AMP
Q402	D•2	2SC1740R	G EQ AMP
Q403	D•3	2SC1740R	G EQ AMP
Q404	D•3	2SC1740R	G EQ AMP
Q500	F•1	2SC1740S	G EQ AMP
Q501	F•2	2SC1740R	G EQ AMP
Q502	F•2	2SC1740R	G EQ AMP
Q503	F•3	2SC1740R	G EQ AMP
Q504	F•3	2SC1740R	G EQ AMP
Q600	C•4	2SC1740R	AMP
Q601	B•7	2SA564R	SAMPLING GATE
Q602	B•7	2SA564R	SAMPLING GATE
Q603	C•7	2SA564R	SAMPLING GATE
Q604	C•7	2SA564R	SAMPLING GATE
Q605	C•7	2SA564R	SAMPLING GATE
Q606	C•7	2SA564R	SAMPLING GATE
Q607	C•7	2SA564R	SAMPLING GATE
Q608	C•7	2SA564R	SAMPLING GATE
Q609	F•8	2SC1383R	REGULATOR
Q610	F•10	2SD1266P	REGULATOR
Q611	F•10	2SC1740R	REGULATOR
Q612	B•12	2SC2001L1	OSC ILLATOR
Q613	B•12	2SC2001L1	OSC ILLATOR
Q614	D•8	2SA564R	MUTING
Q615	F•11	2SC1383R	REGULATOR
Q616	E•10	2SC1740R	MUTING
Q617	C•3	2SC1740R	AMP
D600	C•1	MA165	A VC
D601	C•1	MA165	A VC
D602	B•1	MA165	RECTIFIER
D603	B•2	MA165	RECTIFIER
D604	B•2	MA165	RECTIFIER
D605	B•4	MA165	RECTIFIER
D606	B•4	MA165	RECTIFIER
D607	B•5	MA165	RECTIFIER
D608	B•5	MA165	RECTIFIER
D609	B•6	MA165	RECTIFIER
D610	B•8	MA165	A VC
D611	B•10	RVDMTZ5R1B	ZENR
D612	B•10	MA165	RECTIFIER
D613	B•10	MA165	RECTIFIER
D614	E•8	RVDS4VB10F	RECTIFIER
D615	E•8	RVDS4VB10F	RECTIFIER
D616	E•8	RVDS4VB10F	RECTIFIER
D617	E•8	RVDS4VB10F	RECTIFIER
D618	G•8	RVDMTZ8R2B	ZENR
D619	E•9	RVD1SR35	RECTIFIER
D623	F•10	RVDMTZ13A	ZENR
D624	F•11	RVDMTZ10A	ZENR
D627	F•9	MA165	SWITCHING
D630	G•9	MA165	SWITCHING



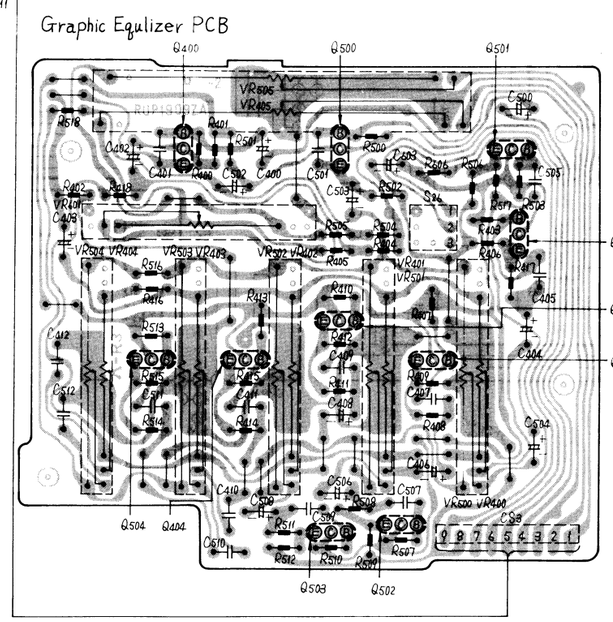
SCHEMATIC DIAGRAM (Amplifier) MODEL RX-C300

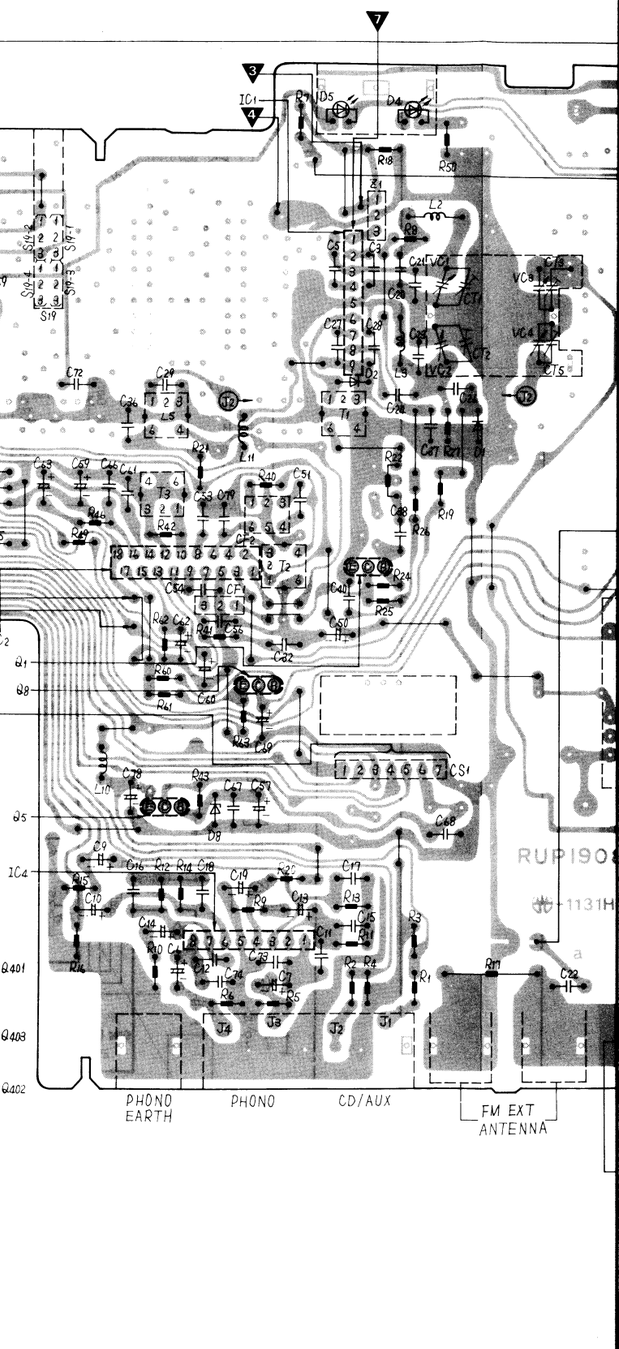


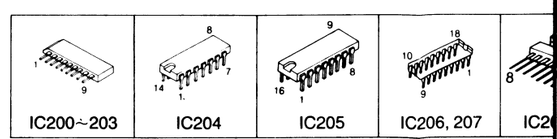
CIRCUIT BOARD AND WIRING CONNECTION DIAGRAM (Tuner Amplifier) MODEL RX-C300



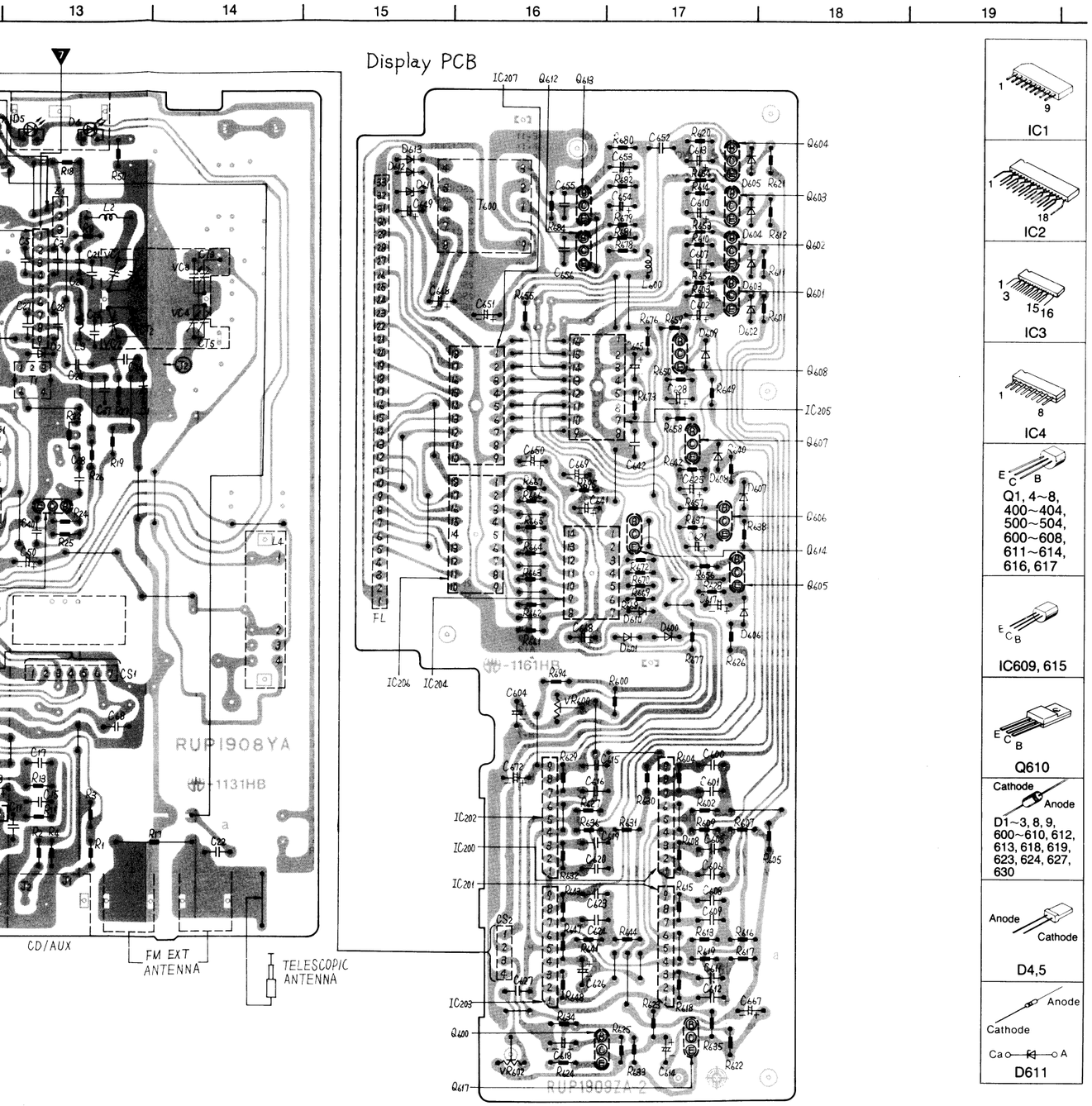
A... From Tape Amp PCB

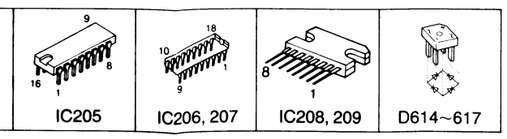






MODEL RX-C300





ELECTRICAL PARTS LIST

Numbering System of Resistor

Example

ERD	25	F	J	101
Type	Wattage	Shape	Tolerance	Value (100Ω)
ERX	2	AN	J	2R2
Type	Wattage	Shape	Tolerance	Value (2.2Ω)

Resistor Type	Wattage Tolerance
ERD: Carbon	10 : ⅛ W J : ±5%
ERDS: Carbon	12 : ½ W
ERX: Metal Film	25 : ¼ W
ERQ: Fuse Type Metal	1 : 1 W
RRD: Carbon (Chip Type)	18 : ⅛ W

Numbering System of Capacitor

Example

ECKD	1H	102	Z	F
Type	Voltage	Value (1000 pF)	Tolerance	Peculiarity
ECEA	50	M	R47	
Type	Voltage	Peculiarity	Value (0.47 µF)	

Capacitor Type	Voltage		Tolerance
	ECEA Type	Other	
ECEA: Electrolytic	OJ : 6.3 V	2H : 500 V DC	C : ±0.25 pF
ECCD: Ceramic	1A : 10 V	1 : 100 V	J : ±5%
ECKD: Ceramic	1C : 16 V	DKC : 400 V AC	K : ±10%
ECQM: Polyyester	1E : 25 V		Z : +80%, −20%
	1H : 50 V		
ECQP: Polyproylene	1V : 35 V		P : +100%, −0%
	50 : 50 V		
ECET: Electrolytic			
ECEA□□□N: Non Polar	25 : 25 V		
Electrolytic	16 : 16 V		
QCU □: Ceramic (Chip Type)			
ECUX: Ceramic (Chip Type)			

REPLACEMENT PARTS LIST

Important safety notice
Components identified by ⚠ mark have special characteristics important for safety.
When replacing any of these components, use only manufacturer's specified parts.

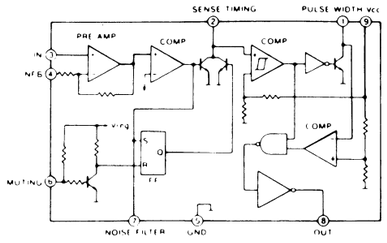
Ref. No.	Part. No.	Part Name & Description
		INTEGRATED CIRCUITS
IC1	**RVITA7358P**	Integrated Circuit
IC2	**BA4234L**	Integrated Circuit
IC3	**RVIBA1332L**	Integrated Circuit
IC4	**RVIBA328MR**	Integrated Circuit
IC101	**AN6205**	Integrated Circuit
IC102	**RVIBA338**	Integrated Circuit
IC103	**RVILM1131C**	Integrated Circuit
IC200,201,202,203	**AN6561**	Integrated Circuit
IC204	**LB1407**	Integrated Circuit
IC205	**RVIM54832P-1**	Integrated Circuit
IC206,207	**RVIMSL915RS**	Integrated Circuit
IC208,209	**AN7161N**	Integrated Circuit
IC901	**LM6417E543**	Integrated Circuit
IC902	**DN6838A**	Integrated Circuit
		TRANSISTORS
Q1	**2SC1359B**	Transistor, Si
Q4,8,303,308,319,322,601,602,603,604,605,606,607,608,614	**2SA722-S**	Transistor, Si
Q5,6,7,104,106,107,108,109,110,111,204,206,207,208,209,210,211,307,309,312,316,317,318,321,323,324,325,401,402,403,404,501,502,503,504,600,611,616,617	**2SC1740R**	Transistor Si
Q101,102,201,202	**2SC1845E**	Transistor, Si
Q103,203	**2SC1788RDR1**	Transistor, Si
Q105,112,205,212,301,302,313,400,500	**2SC1740S**	Transistor, Si
Q304,305	**2SC2001K1**	Transistor, Si
Q306	**2SC1740LNR**	Transistor, Si
Q320	**2SA886**	Transistor, Si
Q609,615	**2SC1383**	Transistor, Si
Q610	**2SD1266P**	Transistor, Si
Q612,613	**2SC2001L1**	Transistor, Si
Q901	**2SD592R**	Transistor, Si
Q903,904	**2SB1030Q**	Transistor, Si
Q905	**2SA1115**	Transistor, Si
Q906	**2SB621R**	Transistor, Si
		DIODES & RECTIFIERS
D1	**MA840B**	Diode, Si
D2,3,9,101,102,103,201,202,203,301,302,307,308,309,310,311,312,313,314,315,316,317,318,321,322,323,324,325,326,331,332,333,600,601,602,603,604,605,606,607,608,609,610,612,613,627,630	**MA165**	Diode, Si
D4, 5	**LN021244P**	LED
D8,319	**RVDMTZ6R8B**	Diode, Si
D303,304,305,306	**LN041245P**	LED
D327,619	**RVD1SR35**	Diode, Si
D330,623	**RVDMTZ13A**	Diode, Si
D611	**RVDMTZ5R1B**	Diode, Si
D614,615,616,617	**RVDS4VB10F**	Diode, Si
D618	**RVDMTZ8R2B**	Diode, Si
D624	**RVDMTZ10A**	Diode, Si
D901	**MA4068L**	Diode, Si
D902,903,904,905,906,907,908,909,910,911	**RVD1SS133**	Diode, Si
		COILS
L2	**RLD4Y44**	Antenna Coil, FM
L3	**RLD4Y5**	Oscillator Coil, FM
L4	**RLF2D143**	Bar Antenna, AM
L6	**RLA3B44**	Coil, SW Ant.
L11	**RLQZB101K**	Choke Coil
L101,201	**RLE5031**	Coil, Filter
L102,202	**RLQZM473J**	Choke Coil
L103,203	**RLQZD822J**	Choke Coil
L301	**RLQZB221K**	Choke Coil
L600, 601,602,603,604	**RLQZB101K**	Choke Coil
L901	**RLQZD101K**	Choke coil
		TRANSFORMERS
T1,3	**RLI4B153**	I.F. Transformer, FM
T2	**RLI2B153**	I.F. Transformer, AM
T301	**RL09C34**	Oscillator Coil
T302 Ⓜ (For U.S.A.)	**RLT5Z5M1A**	Power Transformer ⚠
T302 Ⓒ (For Canada.)	**RLT5Z5C1A**	Power Transformer ⚠
T600	**RLT9F3B**	Oscillator Coil
		THERMISTOR
TH301	**RRT202**	Thermistor
		VARIABLE CAPACITOR
VC1	**RCV4LC2R1A**	Tuning Capacitor
		TRIMMER CONDENSER
CT4	**RCVPL5A**	Trimmer Capacitor
CT5,7,8	**RCVTZ11F**	Trimmer Capacitor
		VARIABLE RESISTORS
VR1	**EVND4AA00B14**	Variable Resistor, 10 kΩ (B)
VR100,200	**EVND4AA00B52**	Variable Resistor, 500Ω (B)
VR101,102,201,202	**EVND4AA00B15**	Variable Resistor, 100 kΩ (B)
VR301	**EWASF0C95A14**	Variable Resistor, 10 kΩ (A)
VR302	**EVND4AA00B24**	Variable Resistor, 20 kΩ (B)
VR400, 401, 402, 403, 404, 500, 501, 502, 503, 504	**EWASA2C95G54**	Variable Resistor, 50 kΩ (G)
VR405,505	**EWAPA1C10A54**	Variable Resistor, 50 kΩ (A)
VR600	**EVND4AA00B14**	Variable Resistor, 10 kΩ (B)
VR601	**EWASJ2C95G54**	Variable Resistor, 50 kΩ (G)
VR602	**EVND4AA00B15**	Variable Resistor, 100 kΩ (B)
		CERAMIC FILTERS
CF1	**RVF107WMZ**	Ceramic Filter
CF2	**RVFSFZ455B**	Ceramic Filter
		FILTER
Z1	**RXABPWB5**	B.P.F.
		FLUORESCENT LEVEL METER
FL1	**RADBG271ZS**	Display, LCD
		SWITCHES
S1,2,3,4,5,6,11	**EVQQS405K**	Slide Switch FWD, REV, Stop, Rec Mute FF, Rew, Rec Standby
S7,12,26	**RSH2B24T**	Push Switch, Blank skip On/Off SPE ANA. On/Off Dolby NR In/Out
S8,9,10	**RSHX073Z**	Push Switch, Reverse Mode
S14	**RSH2B37Z**	Switch, Power
S16 Ⓜ (For U.S.A.)	**RSR4A08Y**	Switch, Voltage Selector ⚠
S17	**RSS3F13Z**	Switch, Tape Selector
S18,19,21,22,23,24	**RSHX074Z**	Switch, Function
S25	**RSS3A12Z**	Switch, FM Mode/Beat Proof
S901,902	**RSH1A46Z**	Switch, Rec Check
S903	**RSH1A47Z**	Switch, Mode
	RSHX074Z	
		JACKS
J1~4	**RJF1091Z**	Jack
J5	**RJF1087Z**	Jack
J6	**RJJ1D27Z**	Jack, Headphones
J7 (S15)	**RJJ1D20Y**	Jack, AC In ⚠
J8	**RJJ1F1Y**	Jack, DC In

Ⓜ...For U.S.A.

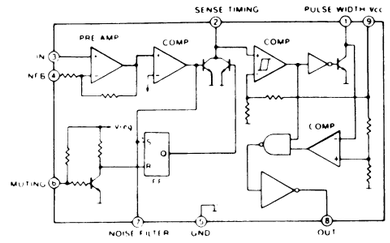
Ⓒ...For Canada.

Ref. No.	Part. No.
RESISTORS	
R,2,29,30,49,	
362,432,532	**ERDS2TJ473**
R3,4,109,123,	
128,209,223,	
228,668,693	**ERDS2TJ153**
R5,6,356,902	**ERDS2TJ683**
R7,59	**ERDS2TJ330**
R8,18,20,22,26,	
33,418,518	**ERDS2TJ101**
R9,10,108,208,	
301,348	**ERDS2TJ152**
R11,12,15,16,47,	
60,61,122,125,	
130,134,140,145,	
222,225,230,234,	
240,245,303,307,	
320,324,340,343,	
349,355,649,672,	
685,689,692,912	**ERDS2TJ103**
R13,14,48,52,53,	
62,106,126,206,	
226,313,347,	
354,365,410,	
431,510,531,	
669	**ERDS2TJ104**
R17	**ERG1ANJP101**
R19,41,54,55	**ERDS2TJ224**
R21,45,58,63,	
357,674,	**ERDS2TJ470**
R24,112,131,	
212,231	**ERDS2TJ684**
R25,310,318,	
335,676	**ERDS2TJ471**
R27,42,105,	
205,401,501	**ERDS2TJ392**
R34,100,101,	
103,104,111,200,	
201,203,204,211,	
366,372,602,613,	
627	**ERDS2TJ222**
R35,36,107,	
207,605,607,616,	
617,623,630,631,	
636,644,661,662,	
663,664,665,666,	
691	**ERDS2TJ562**
R37,56,57,	
141,142,241,242,	
323,336,358,647,	
901,910,911	**ERDS2TJ102**
R39	**ERDS2TJ821**
R40,312,319,	
368,371,606,671	**ERDS2TJ221**
R43,50,113,	
213,321,322,344,	
411,414,416,511,	
514,516,688	**ERDS2TJ331**
R44,115,137,	
215,237,	**ERDS2TJ822**
R46,316,327,406,	
409,412,415,506,	
509,512,515,641	**ERDS2TJ682**
R102,202	**ERDS2TJ100**
R110,127,210,	
227,346,367,670,	
690	**ERDS2TJ333**
R114,214,311,	
315,601,611,612,	
621,626,640	**ERDS2TJ272**
R116,216,681,	
682	**ERDS2TJ122**
R117,217	**ERDS2TJ683**
R118,218,604,	
608,615,618,629	**ERDS2TJ274**
R119,143,219,	
243,302,342,352,	
405,505	**ERDS2TJ223**
R120,138,139,	
220,238,239	**ERDS2TJ332**
R121,124,129,	
133,136,144,221,	
224,229,233,236,	
244,304,308,309,	
328,334,338,341,	
359,369,402,502,	
634,635,638,679,	
680,904,905,906,	
907,908,909,913	**ERDS2TJ472**
R132,232	**ERDS2TJ681**
R135,235,326,	
332	**ERDS2TJ151**
R300	**ERDS2TJ1R0**
R305,684	**ERDS2TJ2R2**
R306	**ERDS2TJ155**
R314	**ERD25TJ106**
R317,360,373	**ERDS2TJ820**
R325	**ERDS2TJ184**
R329	**ERD25FJ470**
R350	**ERD25FJ102**
R353,624,678	**ERD25FJ561**
R370	**ERC12ZGM335**
R400,500	**ERDS2TJ474**
R403,407,503,	
507,600,652,653,	
654,655,656,657,	
658,659	**ERDS2TJ124**
R404,504,673,	
903	**ERDS2TJ393**
R408,417,508,	
517,633	**ERDS2TJ391**
R413,513	**ERDS2TJ823**
R433,533	**ERDS2TJ181**
R603,610,614,	
620,628,632,637,	
642,650	**ERDS2TJ334**
R609,619	**ERDS2TJ182**
R622	**ERDS2TJ184**
R625	**ERDS2TJ564**
R643,648	**ERDS2TJ394**
R660,667	**ERD2FCJ3R3P**
R675	**ERDS2TJ222**
R677	**ERDS25FJ470**
R695	**ERDS2TJ220**
R901,910,911	**ERDS2TJ102**
R902	**ERDS2TJ683**
R903	**ERDS2TJ393**
R904,905,906,	
907,908,909,913	**ERDS2TJ472**
R912	**ERDS2TJ103**
R914	**ERDS2TJ682**
CAPACITORS	
C3,28,636,	
637,639,640,662,	
663,666	**ECKD1H103MD**
C5	**RCBS1H3R9KL**
C6,7,50,64,65,	
602,607,610,613,	**ECEA1CU100**
C8,73,74,657	**ECCD1H101K**
C9,10,667	**ECEA1HU3R3**
C11,12,418,518,	
642,660,906,914	**ECKD1H471KB**
C13,14,45,46,60,	
62	**ECEA1HU4R7**
C15,16,61,66	**ECFT1E103MD**
C17,18,36	**ECFT1E333MD**
C19,78,303,	
668,669,672	**ECEA0JU101**
C20,22,37,38,	
659,673,911	**ECKD1H102MD**
C21	**ECCD1H180KC**
C23,27	**RCBS1H180JC**
C24,51	**ECCD1H470KC**
C26	**ECCD1H030CC**
C29	**ECCD1H050DC**
C32,510,655,	
656	**ECFT1E473MD**
C40,67,68,72,75,	
76,77,370	**ECKD1H103ZF**
C41,42,43,44,52,	
63,901	**ECEA1HU010**
C47,48,53,54	**ECFT1E223MD**
C49	**ECFT1E153MD**
C55	**ECEA1HU0R1**
C56	**ECCD1H331K**
C57	**ECEA1AU101**
C58	**ECQG1H102KZ**
C59	**ECEA0JU221**
C69	**ECEA0JU470**
C79,907	**ECCD1H221K**
	ECQV1H102MD
C100,200	**ECEA50M1R**
C101,110,125,	
135,201,210,225,	
235,310,324,339	**ECEA1HU010**
C102,105,202,	**RCBS1H221KB**
205,311,902	
C103,203	**RCBS1H821KB**
C104,117,204,	
217	**ECKD1H102MD**
C106,121,206,	
221,340	**ECFT1E333KD**
C107,207,325	**ECEA0JU330**
C108,208	**ECEA1HUR47**
C109,209,337	**ECEA1CU220**
C111,211	**ECFT1E332KD**
C112,118,129,	
212,218,229,319,	
321,323,328,334,	
403,503	**ECEA1CU100**
C113,213	**ECEA1HK0R1**
C114,134,214,	
234	**RCBS1H101KB**
C115,120,128,	
215,220,228	**ECEA1HUR33**
C116,124,132,	
216,224,232	**ECFT1E473KD**
C119,219,309	**ECFT1E472KD**
C122,123,126,	
127,222,223,226,	
227,349	**ECEA1EU4R7**
C130,230	**ECKD1H222MD**
C131,231	**ECQM1H153JV**
C133,233	**ECFT1E223KD**
C136,236,312,	
345	**ECEA0JU101**
C301,350	**ECFT1E103MD**
C305	**ECQP2A182JZ**
C306	**ECQP2A103JZ**
C307,327,335	**ECEA1AU221**
C313,314	**RCBS1C222MX**
C316,326	**ECEA1AU471**
C317	**RCBS1C472MXY**
C318,330,333	**ECEA1AU470**
C320,322,653,	
654	**ECEA1HUR22**
C338,629,630	**ECEA1VU222**
C341,342	**ECEA1HN010**
C344,643,661,	
908	**ECEA1CU221**
C346	**ECKD1H103ZF**
C347,381,628	**RCBS1H101KB**
C348	**RCBS1H331KB**
C371,372	**ECKD1H102MD**
C380	**RCBS1H100JC**
C400,402,404,	
500,502,504,625	**ECEA1HU010**
C405,410,505	**ECFT1E473MD**
C406,506	**ECEA1HUR47**
C407,507	**ECFT1E153MD**
C408,508	**ECEA1HUR22**
C409	**ECFT1E472KD**
C411,511	**ECFT1E152KD**
C412,512	**ECFT1E223MD**
C413,513,522,	
641	**ECEA1HU010**
C414,415,514,	
515	**ECEA1CU470**
C416,516,626	**ECEAOJU470**
C417,517	**ECEA1VU101**
C419,426,519,	
526	**ECQG1H104KZ**
C420,422,520,	
522,665	**ECQV1H223JZ**
C423,523,524	**ECEA1CU330**
C425,525	**ECEA1EN220**
C509	**RCBS1C472MX**
C600,601	**ECQV1H154JZ**
C603	**ECEA1AU471**
C604	**ECEA0JU101**
C605,606	**ECQV1H823JZ**
C608,609	**ECQM1H223JV**
C611,612	**ECQM1H822JV**
C614,617,618,	
621	**ECEA1HU3R3**
C615,616	**ECQM1H222JV**
C619,620	**ECQP2A821JZ**
C623,624	**ECQP2A331JZ**
C627	**ECFT1C333MD**
C633	**ECEA1CU102**
C634,646	**ECEA1CU101**
C644	**ECFT1C104MD**
C645	**ECEA1AU101**
C648	**ECEA1EU330**
C649	**ECEA1HU4R7**
C650	**ECEA1AU221**
C651	**ECEA1AU102**
C652	**ECFT1E683MD**
C664	**ECEA1CU470**
C903	**ECSF1AE106**
C904	**RCBS1C103NY**
C905	**ECEA1CU101**
C911	**ECKD1H152MD**
C912	**RCBS1H102KB**
C913	**RCBS1H471KB**

IC102 RVIBA338



IC103 RVILM1131C



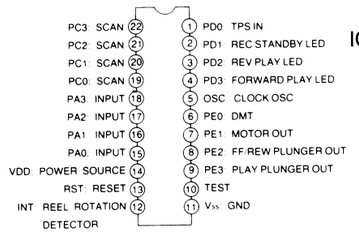
Notes:

1. S1: Forward switch.
2. S2: Reverse switch.
3. S3: Fast forward switch.
4. S4: Rewind switch.
5. S5: Rec mute switch.
6. S6: Stop switch.
7. S7: Blank skip switch.
8. S8~S10: Reverse mode switch in "repeat two-side playback or two-side recording" position.
   (S8...repeat two-side playback or two-side recording, S9...two-side playback or two-side recording, S10...one-side playback or one-side recording)
9. S11: Rec switch.
10. S12: Dolby NR switch.
11. S14-1, S14-2: Power switch in "OFF" position.
12. S15: AC/DC selector switch.
13. S16: Voltage selector switch. [M] (For U.S.A.)
14. S17-1~S17-4: Tape selector switch in "NORMAL" position.
    (1...NORMAL, 2...CrO_2, 3...METAL)
15. S18: Timer standby switch in "OFF" position.
    (1...PLAY, 2...OFF, 3...RECORD)
16. S901, S902: Rec check switch.
17. S903: Mode switch.
18. VR100, 200: Playback level adjustment.
    VR101, 201: Bias current adjustment.
    VR102, 202: Overall gain adjustment.
    VR302: Erase current adjustment.
19. DC voltage measurements are taken with electronics voltmeter from negative terminal of battery.
    < >...Recording, [ ]...No signal,
    ( )...Signaled, << >>...at the "OFF" moment,
    ●...Dolby ON, ○...Dolby off, (( ))...recorded part
    [[ ]]...unrecorded part, ◎...Pully—moving, □... Pulley—stop
20. Battery current: No signal...280 mA (display off)
    450 mA (display on)
    Maximum output...3A (radio)
    2.8A (playback)
    2.7A (recording)
21. **Important safety notice**
    The shaded area on this schematic diagram incorporates special features important for protection from fire and electrical shock hazards.
    When servicing it is essential that only manufacturer's specified parts be used for the critical components in the shaded areas of the schematic.

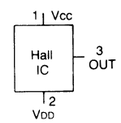
...Record
...Playback
...Tape/Phono/Radio/CD/ LINE IN

...⊕ Voltage line
...⊕ Voltage line
(Using with AC cord: AC
Using with DC IN or battery: DC)

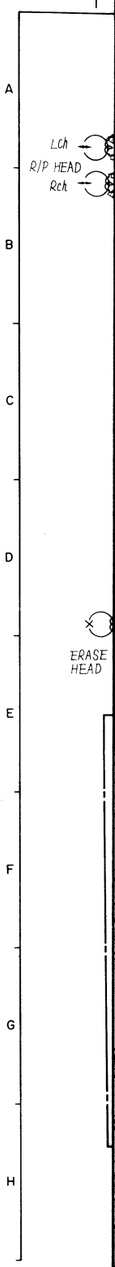
IC901 LM6417E543



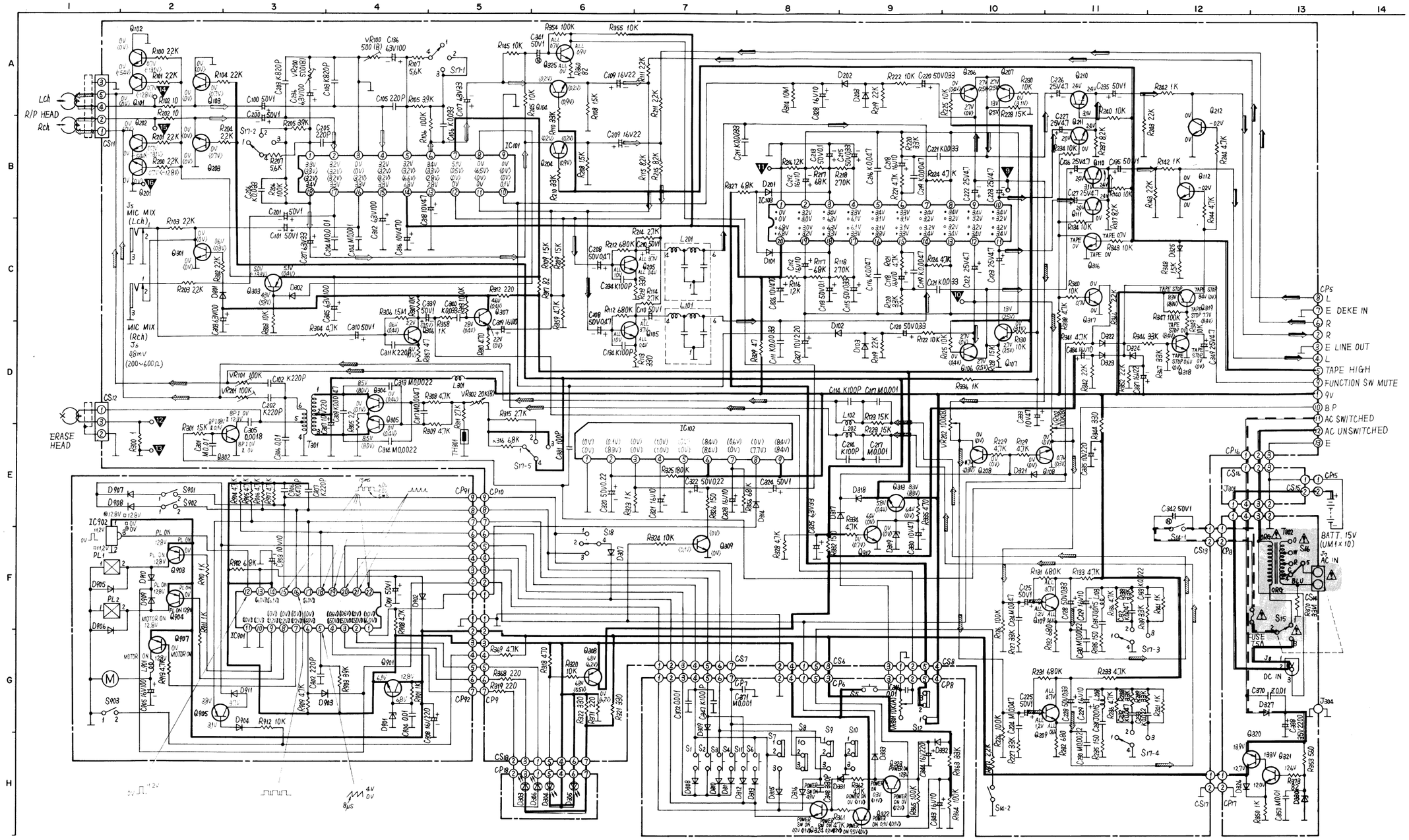
IC902 DN6838A



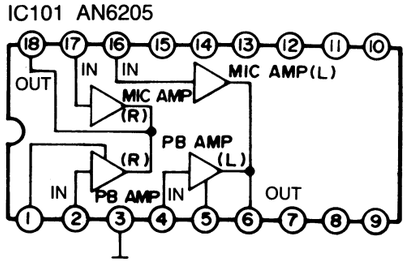
Ref No.	Zone	Part No.	Function Name
IC101	B-4	AN6205	EQ AMP
IC102	E-7	RVIBA338	TPS
IC103	B-9	RVILM1131C	DOLBY
IC901	F-3	RVILM6417E543	MECH CONT
IC902	F-1	DN6838A	DIRECTION DET.
Q101	A-2	2SC1845E	SWITCHING
Q102	A-2	2SC1845E	SWITCHING
Q103	A-2	2SC1788RDR1	SWITCHING
Q104	A-6	2SC1740R	SWITCHING
Q105	D-6	2SC1740S	AF AMP
Q106	D-10	2SC1740R	SWITCHING
Q107	D-10	2SC1740R	SWITCHING
Q108	E-11	2SC1740R	REC MUTE
Q109	F-11	2SC1740R	REC AMP
Q110	B-11	2SC1740R	SWITCHING
Q111	B-11	2SC1740R	SWITCHING
Q112	B-12	2SC1740S	MUTING
Q201	B-2	2SC1845E	SWITCHING
Q202	B-2	2SC1845E	SWITCHING
Q203	B-2	2SC1788RDR1	SWITCHING
Q204	B-6	2SC1740R	SWITCHING
Q205	C-6	2SC1740S	AF AMP
Q206	A-10	2SC1740R	SWITCHING
Q207	A-10	2SC1740R	SWITCHING
Q208	E-10	2SC1740R	REC MUTE
Q209	G-11	2SC1740R	REC AMP
Q210	A-11	2SC1740R	SWITCHING
Q211	B-11	2SC1740R	SWITCHING
Q212	B-12	2SC1740S	MUTING
Q301	C-2	2SC1740S	MUTING
Q302	E-3	2SC1740S	SWITCHING
Q303	C-3	2SA564R	SWITCHING
Q304	D-4	2SC2001K1	BIAS OSC
Q305	E-4	2SC2001K1	BIAS OSC
Q306	D-4	2SC1740LNR	MIX AMP
Q307	D-5	2SC1740R	MIX AMP
Q308	G-6	2SA564R	SWITCHING
Q309	F-7	2SC1740R	SWITCHING
Q312	F-9	2SC1740R	SWITCHING
Q313	E-9	2SC1740S	REGULATER
Q316	C-11	2SC1740R	SWITCHING
Q317	C-11	2SC1740R	SWITCHING
Q318	D-12	2SC1740R	SWITCHING
Q319	C-12	2SA564R	SWITCHING
Q320	H-13	2SA886R	REGULATER
Q321	H-13	2SC1740R	REGULATER
Q322	H-9	2SA564R	SWITCHING
Q323	H-9	2SC1740R	SWITCHING
Q324	H-8	2SC1740R	SWITCHING
Q325	A-6	2SC1740R	AF AMP
Q901	G-4	2SD592R	REGULATER
Q903	F-2	2SB1030Q	SWITCHING
Q904	F-2	2SB1030Q	SWITCHING
Q905	G-2	2SA1115E	SWITCHING
Q906	G-2	2SB821R	SWITCHING
D101	C-8	MA165	SWITCHING
D102	D-9	MA165	RECTIFIER
D103	D-9	MA165	RECTIFIER
D201	B-8	MA165	SWITCHING
D202	A-9	MA165	RECTIFIER
D203	A-9	MA165	RECTIFIER
D301	C-3	MA165	SWITCHING
D302	C-3	MA165	SWITCHING
D303	H-5	LN041245P	LED
D304	H-6	LN041245P	LED
D305	H-6	LN041245P	LED
D306	H-6	LN041245P	LED
D307	F-6	MA165	SWITCHING
D308	H-7	MA165	SWITCHING
D309	G-7	MA165	SWITCHING
D310	H-7	MA165	SWITCHING
D311	H-7	MA165	SWITCHING
D312	H-8	MA165	SWITCHING
D313	H-8	MA165	SWITCHING
D314	E-8	MA165	SWITCHING
D315	H-8	MA165	SWITCHING
D316	H-8	MA165	SWITCHING
D317	E-9	MA165	SWITCHING
D318	E-9	MA165	SWITCHING
D319	E-9	RVDMTZ6R8B	REGULATER
D321	E-10	MA165	SWITCHING
D322	D-11	MA165	SWITCHING
D323	D-11	MA165	SWITCHING
D324	D-11	MA165	SWITCHING
D325	C-12	MA165	SWITCHING
D326	H-12	MA165	SWITCHING
D327	G-13	RVD1SR35	RECTIFIER
D330	H-13	RVDMTZ13A	REGULATER
D331	H-9	M165	SWITCHING
D332	H-9	M165	SWITCHING
D333	H-9	M165	SWITCHING
D901	G-4	MA4068M	REGULATER
D902	F-4	RVD1SS133	SWITCHING
D903	G-3	RVD1SS133	SWITCHING
D904	H-3	RVD1SS133	SWITCHING
D905	F-1	RVD1SS133	SWITCHING
D906	G-1	RVD1SS133	SWITCHING
D907	E-2	RVD1SS133	SWITCHING
D908	E-2	RVD1SS133	SWITCHING
D909	F-2	RVD1SS133	SWITCHING
D910	F-2	RVD1SS133	SWITCHING
D911	G-3	RVD1SS133	SWITCHING

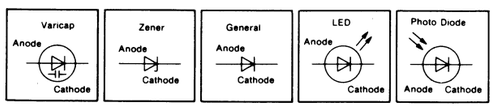


SCHEMATIC DIAGRAM (Cassett Deck) MODEL RX-C300



IC101 AN6205





CIRCUIT BOARD AND WIRING CONNECTION DIAGRAM (Cassette Deck) MODEL RX-C300

Logic PCB

LED PCB

Switch PCB

Tape Amp PCB

Power

For Canada

T302
POWER TRANSFORMER

T302
POWER TRANSFORMER

A... To Power Amp PCB

RED
BLU
ORG
WHT
RED
BRN
BLU
ORG
ORG

P/P HEAD
ERASE HEAD

PNK
SLD
WHT

MOTOR

CIRCUIT BOARD AND WIRING CONNECTION DIAGRAM (Cassette Deck) MODEL RX-C300

6 7 8 9 10 11 12 13 14 15 16 17 18 19

Ⓐ... To Power Amp PCB

Tape Amp PCB

Power Source PCB

Ⓒ For Canada

T302 POWER TRANSFORMER

T302 POWER TRANSFORMER

RED
BLU
ORG
WHT
RED
BRN
BLU
ORG
ORG

J7 AC IN
J8 DC IN
FUSE 5A 125V
S14
S15
R370
CS13
J301

R/P HEAD
ERASE HEAD

PNK
SLD
WHT

LUG TERMINAL

BATTERY 15V (UM1×10)

connecting PCB

BLU WHT SLD RED BLK

MIC MIX

IC101

IC102

IC103

IC901

IC902

E C B
Q101~112, 201~212, 301~309, 312, 313 316~319, 321~325, 901, 906

Q320

Q903, 904

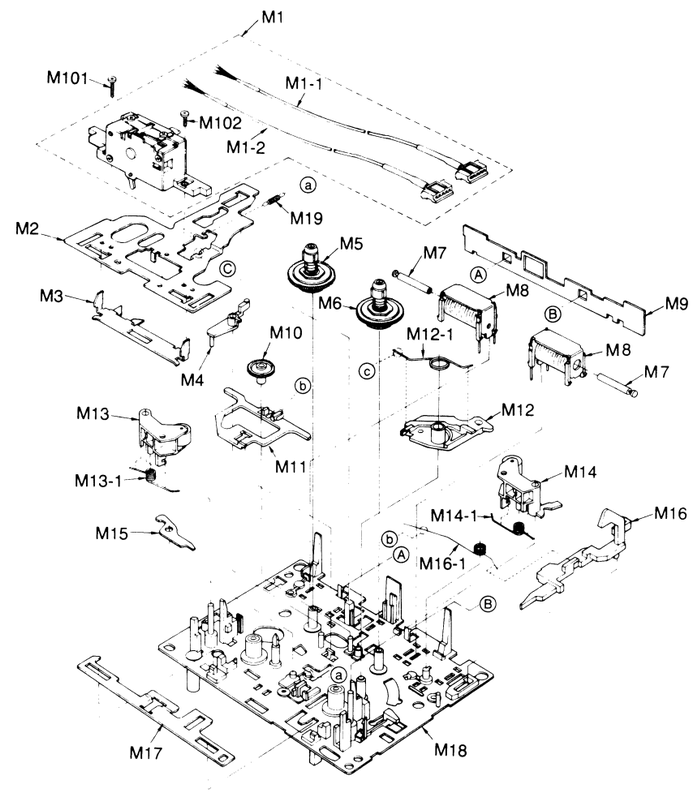
Q905

Cathode
Anode
D101~103, 201~203, 301, 302, 307~319, 321~327, 330~333, 902~911

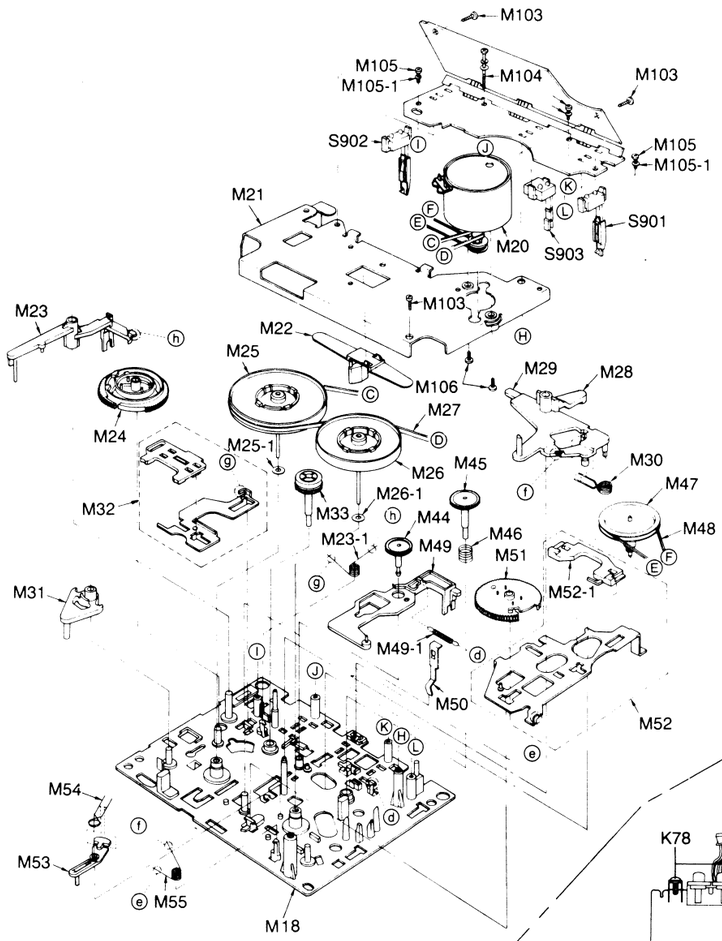
Cathode
Anode
D901

MECHANISM PARTS LOCATION

●Front View



●Rear View

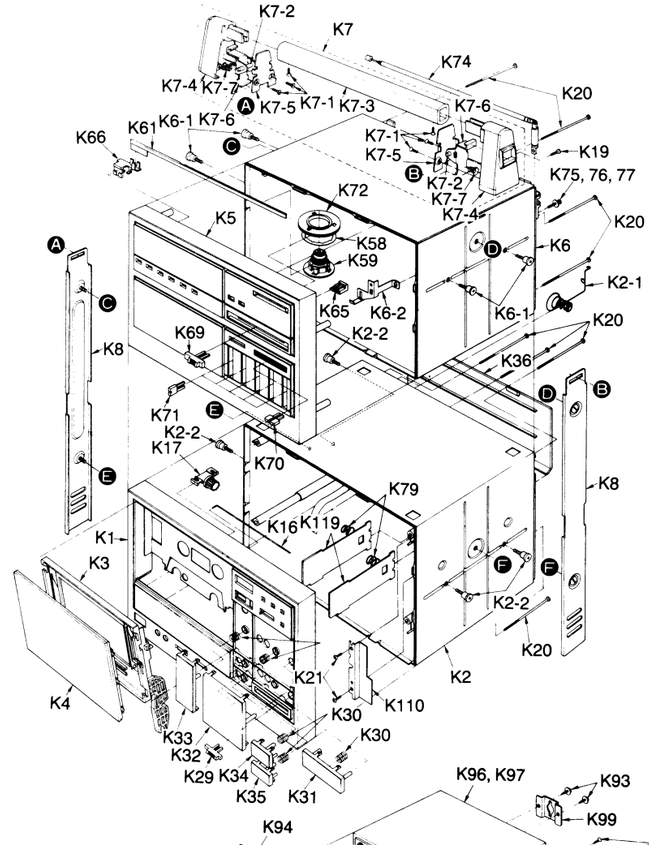


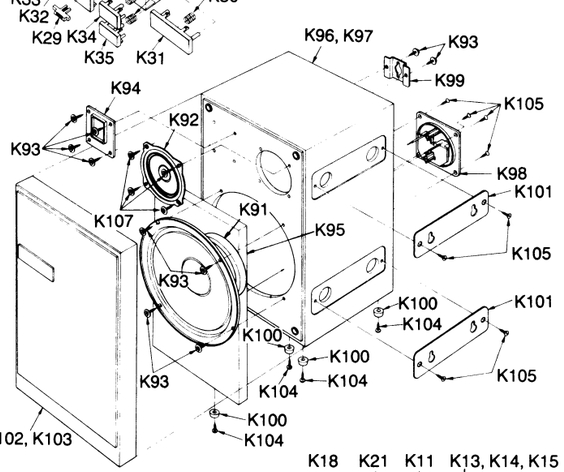
Specification

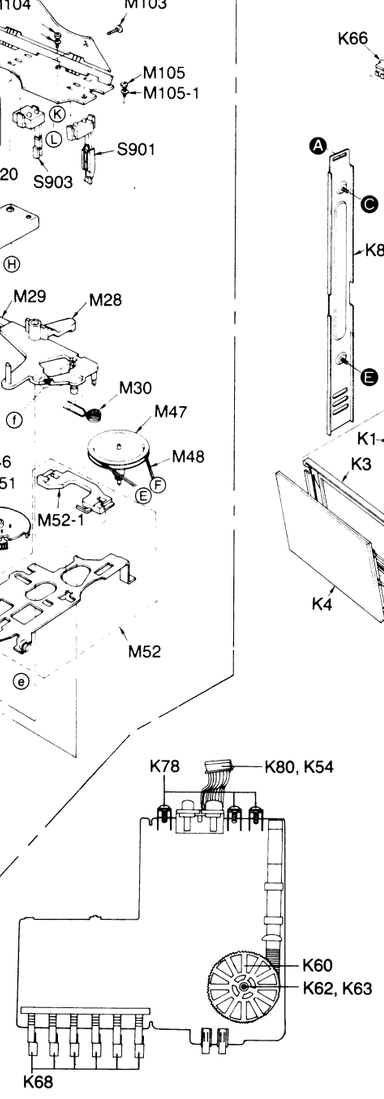
Pressure of pressure roller	210 gr
Takeup tension	90 gr
Wow & flutter	0.08% (WRMS)

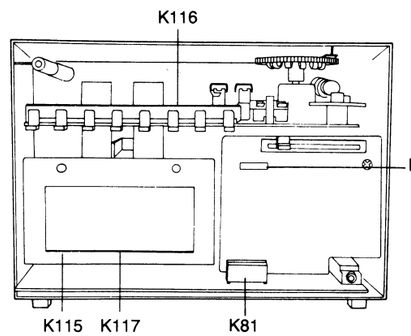
Ref. No.	Part. No.	Part Name & Description
		MECHANICAL PARTS
M1	**RMDG0001Z**	Head Block Ass'y
M1-1	**RJSG0001Z**	Lead Wire, R/P H
M1-2	**RJSG0002Z**	Lead Wire, EH
M2	**RUA9029Z**	Head Base Plate
M3	**RUB342Z**	Rod, Pinch Roller
M4	**RUB347Z**	Arm, Takeup Select
M5	**RDMG0002Z**	Reel Table (F) Ass'y
M6	**RDMG0001Z**	Reel Table (R) Ass'y
M7	**RUB358Z**	Shaft, Plunger
M8	**RUEG0001Z**	Plunger Ass'y
M9	**RUB344Z**	Lever, Switch
M10	**RDG5772Z**	Gear, Takeup Sub
M11	**RUB353Z**	Rod, Brake
M12	**RUBG0001Z**	Min Lever Ass'y
M12-1	**RUW14Z**	Spring, Main Lever
M13	**RUBG0007Z**	Pinch Roller (F) Ass'y
M13-1	**RUW13Z**	Spring, Pinch Roller (F)
M14	**RUBG0006Z**	Pinch Roller (R) Ass'y
M14-1	**RUW12Z**	Spring, Pinch Roller (R)
M15	**RUB343Z**	Lever, Cue
M16	**RUB351Z**	Rod, Eject
M16-1	**RUW17Z**	Spring, Eject Rod
M17	**RUB341Z**	Rod, FR Select
M18	**RUAG0001Z**	Mecha Chassis
M19	**RUD9Z**	Spring, Head Base
M20	**RJQG0001Z**	DC Motor Ass'y
M21	**RUL734Z**	Bracket, Flywheel
M22	**RMD5001Z**	Spacer
M23	**RUB350Z**	Lever, Main Control
M23-1	**RUW10Z**	Spring, Main Control Lever
M24	**RDG5776Z**	Gear, Main
M25	**RDWG0001Z**	Flywheel (F) Ass'y
M25-1	**OBW2123**	Washer (∅2.5)
M26	**RDWG0002Z**	Flywheel (R) Ass'y
M26-1	**QBW2124**	Washer (∅2.2)
M27	**RDV26Z**	Belt, Main (Flat)
M28	**RUB346Z**	Arm, FF
M29	**RUB348Z**	Lever, FF Spring
M30	**RUW9Z**	Spring, FF Arm
M31	**RUB354Z**	Arm, FR Select
M32	**RUBG0003Z**	FR Rod Ass'y
M33	**RDGG003Z**	Reel Table Gear Ass'y
M44	**RDG5773Z**	Gear, FF
M45	**RDG5769Z**	Gear, Reel
M46	**RUQ10Z**	Spring, Reel Gear
M47	**RDRG0001Z**	Main Pulley Ass'y
M48	**RDV27Z**	Belt, FF (Square)
M49	**RUB349Z**	Lever, Sub Control
M49-1	**RUD8Z**	Spring, Sub Control Lever
M50	**RUS609Z**	Spring, Cassette Holder
M51	**RDG5775Z**	Gear, Sub
M52	**RUBG0004Z**	FF Rod Ass'y
M52-1	**RUB345Z**	Rod, FF Select
M53	**RUB359Z**	Lever, Takeup Select
M54	**RUW15Z**	Spring, Takeup Select Lever
M55	**RUW8Z**	Spring, FF Rod
M101	**XTN2+8B**	Screw, Head Block M'tg
M102	**XTN2+5B**	Screw, Head Block M'tg
M103	**XTN26+7B**	Screw, P.C. Board M'tg
M104	**XYC2+FF15**	Screw, P.C. Board M'tg
M105	**XTN2+5B**	Screw, Switch M'tg
M105-1	**XWG2**	Washer, Switch M'tg
M106	**XSN26+3**	Screw, Motor M'tg

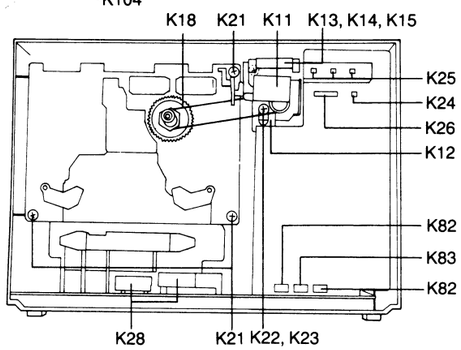
CABINET PARTS LOCATION

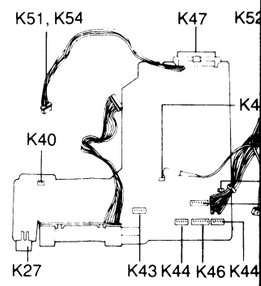










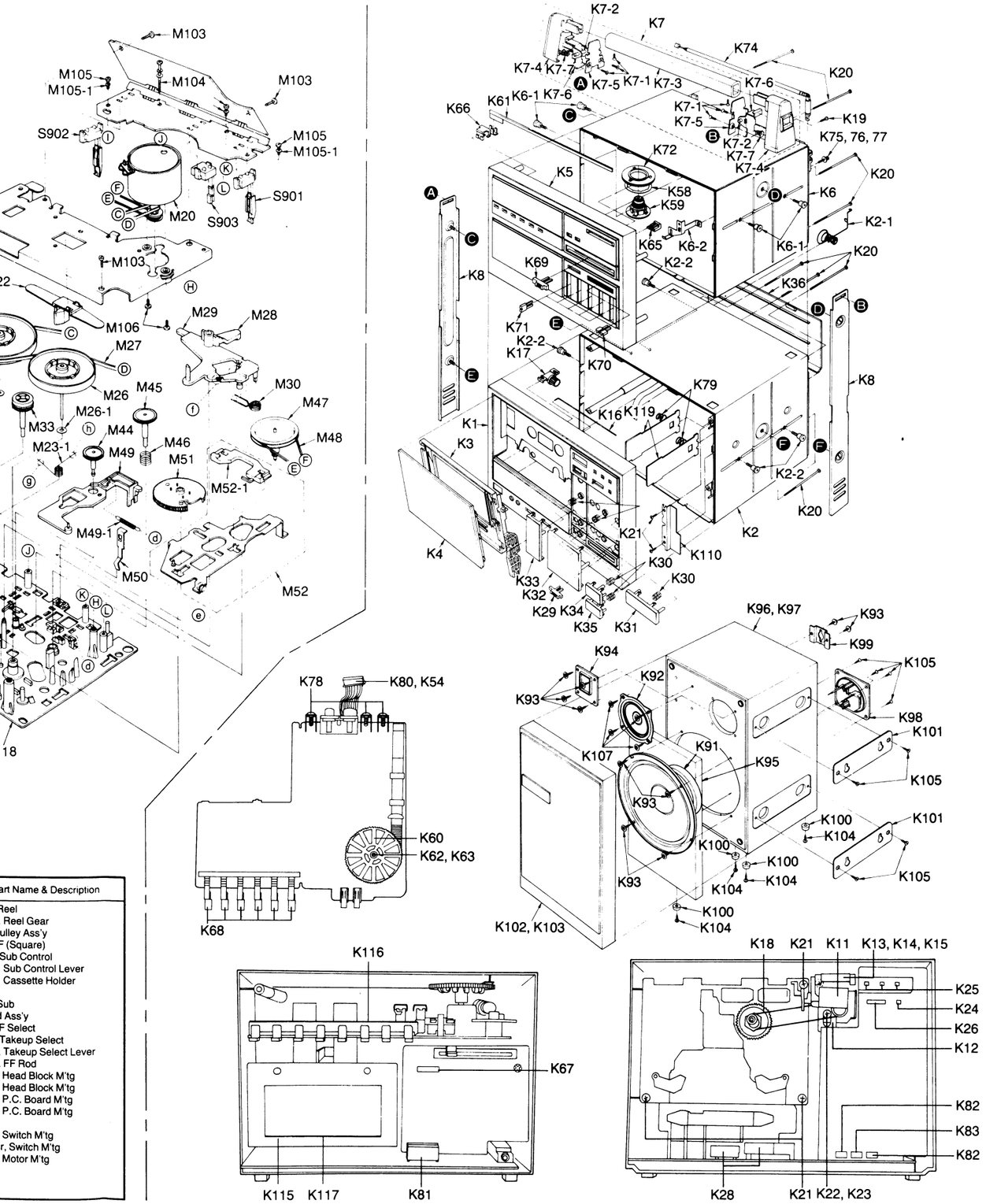


M ...For U

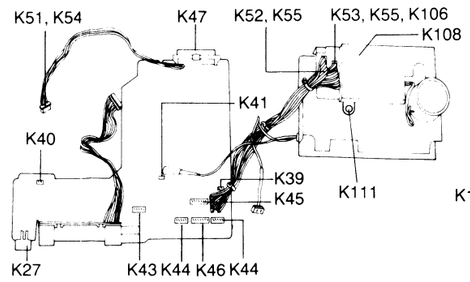
C ...For C

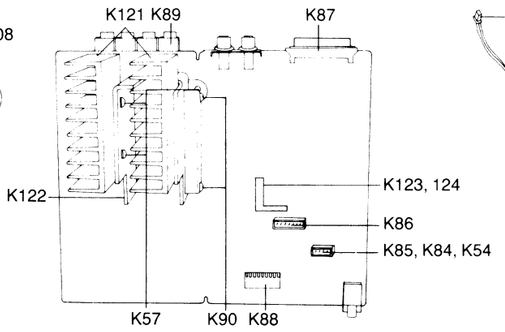
Ref. No.	Pa
K1 M (For U.S.A.)	RYM1
K1 C (For Canada)	RYM1
K2 M (For U.S.A.)	RYF1
K2 C (For Canada)	RYF1
K2-1	RJC5
K2-2	RHK2
K3	RYQX
K4	RYPX
K5	RYM2
K6	RYF2
K6-1	RHK2
K6-2	RJT1
K7	RYHX
K7-1	XTC3
K7-2	RHM1
K7-3	RKX3
K7-4	RKX3
K7-5	RKX3
K7-6	RKE5
K7-7	RUG2
K8	RYYX
K11	RSE1
K12	RUB3
K13	RUB3
K14	RBD3
K15	RUG2
K16	RUW4
K17	RDG5
K18	QDB0
K19	XTB3
K20	XTB3
K21	XTV3
K22	XTN3
K23	XWG3
K24	RBC7
K25	RBC7
K26	RBC7
K27	RBC7
K28	RBD2
K29	RBD3
K30	RDS5
K31	RBC7
K32	RBC7
K33	RBC7
K34	RBC7
K35	RBC7
K36	RKK2
K37	XBA1
K38	QTF1
K39	RJP2
K40	RJP2
K41	RJP3
K42	RJP3
K43	RJP5
K44	RJP5
K45	RJP7
K46	RJP7
K47	RJS1
K48	RMK1
K49	RJS2
K50	RJS2

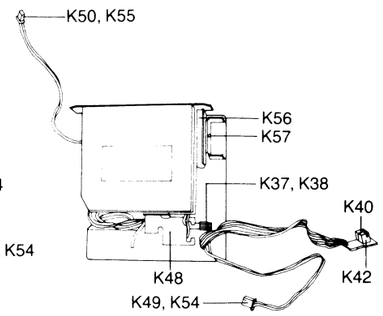
CABINET PARTS LOCATION



art Name & Description
Reel
Reel Gear
ulley Ass'y
F (Square)
Sub Control
Sub Control Lever
Cassette Holder
Sub
l Ass'y
F Select
Takeup Select
Takeup Select Lever
FF Rod
Head Block M'tg
Head Block M'tg
P.C. Board M'tg
P.C. Board M'tg
Switch M'tg
r, Switch M'tg
Motor M'tg







M ...For U.S.A.

C ...For Canada.

Ref. No.	Part. No.	Part Name & Description
		CABINET PARTS
K1 M (For U.S.A.)	**RYM1XC300M**	Front Cabinet Ass'y, Deck
K1 C (For Canada)	**RYM1XC300MC**	Front Cabinet Ass'y, Deck
K2 M (For U.S.A.)	**RYF1XC300M**	Rear Cabinet, Deck
K2 C (For Canada)	**RYF1XC300MC**	Rear Cabinet, Deck
K2-1	**RJC5001Z**	Battery Spring (+/−)
K2-2	**RHK20Z**	Screw, Speaker Hanger
K3	**RYQXC300FX**	Cassette Holder Ass'y
K4	**RYPXC300FX**	Cassette Lid Ass'y
K5	**RYM2XC300M**	Front Cabinet, Tuner, Amp
K6	**RYF2XC300M**	Rear Cabinet Ass'y, Tuner, Amp
K6-1	**RHK20Z**	Screw, Speaker Hanger
K6-2	**RJT1013Z**	Terminal, Telescopic Ant.
K7	**RYHXC300M**	Handle Ass'y
K7-1	**XTC3+8CFN**	Screw, Handle M'tg
K7-2	**RHM191Z**	Shaft, Handle
K7-3	**RKX326Z**	Handle
K7-4	**RKX327Z**	Arm, Handle
K7-5	**RKX328Z**	Cover, Handle
K7-6	**RKE505Z**	Lock Angle
K7-7	**RUQ20Z**	Spring, Handle Release
K8	**RYYXC300FX**	Joint Ass'y
K11	**RSE116Z**	Counter
K12	**RUB364Z**	Bracket, Eject
K13	**RUB365Z**	Bracket, Eject Button
K14	**RBD319Z**	Knob, Eject
K15	**RUQ23Z**	Spring, Eject Button
K16	**RUW42Z**	Spring, Cassette Holder
K17	**RDG5728Z**	Gear, Cassette Holder
K18	**QDB0288**	Counter Belt (Square)
K19	**XTB3+10BFN**	Screw, Socket M'tg
K20	**XTB3+65G**	Screw, Cabinet M'tg
K21	**XTV3+10G**	Screw, Mechanism etc. M'tg
K22	**XTN3+12B**	Screw, Eject Bracket M'tg
K23	**XWG3**	Washer, Eject Bracket M'tg
K24	**RBC702Y**	Button, Dolby
K25	**RBC702Z**	Button, Reverse Mode
K26	**RBC703Z**	Button, Brank Skip
K27	**RBC709Z**	Button, Power
K28	**RBD279Y**	Knob, Timer Standby, Tape Selector
K29	**RBD320Z**	Knob, Mixing Level
K30	**RDS5123Z**	Spring, Button
K31	**RBC704Z**	Button, FF/REW
K32	**RBC705Z**	Button, Play
K33	**RBC706Z**	Button, Stop
K34	**RBC707Z**	Button, Rec Mute
K35	**RBC708Z**	Button, Rec Standby
K36	**RKK226Z**	Battery Cover
K37	**XBA1C50NU100**	Fuse ⚠
K38	**QTF1054**	Fuse Holder
K39	**RJP2G10Z**	Plug (2P) CP17
K40	**RJP2G4Y**	Plug (2P) CP13, 15
K41	**RJP3G10Z**	Plug (3P) CP12
K42	**RJP3G4Y**	Plug (3P) CP16
K43	**RJP5G10Z**	Plug (5P) CP11
K44	**RJP5G11Z**	Plug (5P) CP6, 8
K45	**RJP7G10Z**	Plug (7P) CP18
K46	**RJP7G11Z**	Plug (7P) CP7
K47	**RJS13L12Z**	Socket (13P) CP5
K48	**RMK157Z**	Bracket, Socket
K49	**RJS2L3Z**	Socket (2P) CS13
K50	**RJS2L4Z**	Socket (2P) CS17
K51	**RJS3L3Z**	Socket (3P) CS16
K52	**RJS7L4Z**	Socket (7P) CS7, 9, 11
K53	**RJS9L4Z**	Socket (9P) CS10
K54	**RJT707Z**	Terminal, Socket
K55	**RJT807Z**	Terminal, Socket
K56	**RMY202Z**	Heat Sink, Q320
K57	**XTV3+6BFN**	Screw, Heat Sink etc. M'tg
K58	**RUS548Z**	Spring, Tuning Knob
K59	**RDG5777Z**	Gear, Tuning Knob
K60	**RDG5778Z**	Gear, Dial
K61	**RDE146Z**	Rack, Dial
K62	**XSN26+6**	Screw, Dial Gear
K63	**XWA26B**	Washer, Dial Gear
K65	**RHR1265Z**	Bracket, Volume
K66	**RDP285Z**	Pointer, Dial
K67	**RBC703Z**	Button, Spectrum Analyzer
K68	**RBC710Z**	Button, Function
K69	**RBD321Z**	Button, Volume
K70	**RBD322Z**	Button, Balance
K71	**RBD323Z**	Button, Graphic EQ.
K72	**RBT182X**	Knob, Tuning
K74	**XEARR175FAK**	Telescopic Ant.
K75	**XSN3+8BNS**	Screw, Telescopic Ant M'tg
K76	**XWA3BFN**	Washer, Telescopic Ant M'tg
K77	**XWG3FN**	Washer, Telescopic Ant M'tg
K78	**RJF1095Z**	Terminal, Ext Ant, Earth
K79	**RJC511Z**	Battery Spring
K80	**RJS7L3Z**	Socket (7P) CS1
K81	**RJP9G3Z**	Plug (9P), CS3
K82	**RJS5M3Z**	Socket (5P), CP6, 8
K83	**RJS7M3Z**	Socket (7P), CP7
K84	**RJS4L3Z**	Socket (4P) CS2
K85	**RJP4G4Y**	Plug (4P), CP2
K86	**RJP7G4Y**	Plug (7P), CP1
K87	**RJS13L12Z**	Socket (13P) CP4
K88	**RJS9M1Z**	Socket (9P), CP3
K89	**QJT1104**	Terminal, Speaker
K90	**XTV3+12BFN**	Screw, Heat Sink M'tg
K91	**EAS16PL262S**	Speaker, Woofer
K92	**EAS65PH29G**	Speaker, Squawker
K93	**XMMR31+13FN**	Screw, Speaker M'tg
K94	**RWEXC300FX**	Tweeter Ass'y
K95	**RHS722Z**	Cover
K96	**RKF9029Y**	Speaker Box (L) Ass'y
K97	**RKF9029Z**	Speaker Box (R) Ass'y
K98	**SJFS5204**	Terminal, Speaker
K99	**SKW161-2**	Bracket, Speaker Box
K100	**RHG317A**	Rubber Cushion
K101	**RGE83Z**	Stopper, Speaker Box
K102	**RYM3XC300FX**	Speaker Grille (R) Ass'y
K103	**RYM4XC300FX**	Speaker Grille (L) Ass'y
K104	**XMM31+13FZ**	Screw, Rubber Cushion M'tg
K105	**XMS31+13FZ**	Screw, Stopper
K106	**RJP9G10Z**	Plug (9P) CP91
K107	**XMM35+13FX**	Screw, Squawker M'tg
K108	**RMC1024Z**	Shield Cover, Mechanism
K110	**RUV736Z**	Cover, Battery
K111	**XTN2+3B**	Screw, Shield Cover M'tg
K115	**RMC1000Z**	Shield Cover, FL Circuit
K116	**RMC1001Z**	Shield Cover, FL Circuit
K117	**RHG2075Z**	Rubber, FL Tube
K119	**RUP1908Y**	Printed Circuit Board
K121	**RMY198Z**	Heat Sink, IC208, IC209
K122	**RMY199Z**	Heat Sink, IC208, IC209

Ref. No.	Part. No.	Part Name & Description
K123	**XTV3+8BFN**	Screw, Heat Sink M'tg
K124	**RMY191Z**	Heat Sink, for Q610

PACKINGS

REPLACEMENT PARTS LIST

Important safety notice
Components identified by ⚠ mark have special characteristics important for safety.
When replacing any of these components, use only manufacturer's specified parts.

Ref. No.	Part. No.	Part Name & Description
		ACCESSORIES
A1 M (For U.S.A.)	**RQX4615Z**	Instruction Book
A1 C (For Canada.)	**RQX4616Z**	Instruction Book
A2	**RJP0G1Z**	Joint Cord
A4	**RJE123Y**	Speaker Cord
A5 M (For U.S.A.)	**RJA22X**	Power Cord, AC ⚠
A5 C (For Canada.)	**RJA95Z**	Power Cord, AC ⚠
		PACKINGS
P1	**RPN9499Z**	Pad Complete
P2 M (For U.S.A.)	**RPK2038Z**	Gift Box
P2 C (For Canada.)	**RPK2039Z**	Gift Box
P2-1	**RPE569Z**	Handle, Gift Box
P3	**XZB45X45A01**	Polyethylene Cover
P4	**XZB40X60A01**	Polyethylene Bag
P5	**RQE13Z**	Label
P5	**RPH474Z**	Soft Cover
	RPP682Z	Polyethylene Cover

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